# NOTES ON SOME MISCELLANEOUS COLEOPTERA, WITH DESCRIPTIONS OF NEW SPECIES. PART VI.(1)

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### HYDROPHILIDAE.

#### Hydrochus.

Specimens of this genus, when in perfect condition, are usually polished and sometimes beautifully metallic, but they are frequently so coated with mud that the colour and sculpture are obscured, and it is difficult to separate the species with certainty. When dried the mud clings so closely to the derm that the cephalic grooves, prothoracic foveae, and the punctures generally, appear to be greatly reduced in size, and it is difficult, it not impossible, to clean the specimens so as to bring the derm back to its untarnished condition. Blackburn considered the coating of one species to be "some kind of exudation."

Hydrochus horni, Blackb., and H. interioris, Blackb.

In the original descriptions of these species H, horni was noted as "niger" and  $1\frac{1}{5}$  lines in length; H, interioris as "obscure viridis" and  $1\frac{1}{5}$  lines in length. There are in the South Australian Museum cotypes of both species from Paisley Bluff, but the cotype labels were accidentally reversed, this is rendered quite clear by the descriptions of colour and size and also by the numbers attached to the specimens; in his note-book No. 5488 was entered, when described, as horni, but later on the specimens were labelled as interioris; similarly No. 5489 was noted in the book as interioris, and on the specimens as horni. The mistake is to be regretted as Blackburn subsequently commented upon horni under the name of interioris (2) and wrongly placed both species in the table; thus on page 227 interioris should be read for horni, and on page 228 horni for interioris.

# Hydrochus serricollis, n. sp.

Black, clytra dingy reddish-brown, parts of antennae and of palpi, and legs (except knees and parts of tarsi) paler; under surface velvety-black and grey.

Head rather coarsely granulate-punctate, the punctures somewhat smaller on middle of clypeus than clsewhere; with three somewhat shallow but fairly distinct inter-ocular sulci; clypeal suture curved and well defined. Prothorax much wider at apex than at base, about as long as the basal width; densely granulate-punctate, with seven shallow impressions or foveae: four subbasal, three submedian. Elytra with regular rows of large, subquadrate punctures, those in the sutural row smaller than the adjacent ones; fifth interstice feebly elevated almost throughout. Length, 3-4 mm.

Hab.—Tasmania: East and West Tamar. Georgetown, Launceston (Aug. Simson), Strahan (H. J. Carter and A. M. Lea), Devonport (Lea). South Australia: Lucindale (F. Secker). Type, I. 15514.

<sup>(1)</sup> Part V. was published in 1919.

<sup>(2)</sup> Blackb., Trans. Roy. Soc. S. Austr., 1898, p. 228.

The colour and size of the larger specimens are as described in *H. regularis*, but that species was tabulated as having "IIead not trisulcate between the eyes." The elytra vary from a rather bright brown to almost, if not quite, as black as the prothorax, the darker specimens as a rule being smaller than the others, on an occasional specimen there is a very faint metallic gloss on the head and prothorax; the palpi are almost entirely black on some specimens. The subfoveate impressions of the prothorax are much more distinct on some specimens than on others, occasionally the two medio-basal ones become feebly conjoined and scarcely traceable; the sides of the prothorax, when a specimen is laid on its back, appear to be serrated throughout, but from above this appearance is less conspicuous.

On this as on most (if not all) Australian species of the genus, there are very large punctures on the abdomen, but they are greatly obscured, or sometimes quite concealed by the velvety indumentum of the under surface; the seventh, eighth, and ninth elytral interstices are also slightly curved and irregular about the middle, with the ninth slightly thickened or elevated there.

### Hydrochus brunneonitens, n. sp.

Piceous-brown and shining, elytra obscurely paler, antennae, palpi, and legs still paler; under surface velvety-brown and grey.

Head moderately coarsely punctate; clypeus convex in middle and with smaller punctures than elsewhere; with two rather shallow inter-ocular sulci; clypeal suture wide in middle. Prothorax about as long as the basal width, which is much less than that of apex, sides finely serrated; with four subbasal and three submedian shallow impressions or foveae; densely and rather coarsely punctate. Elytra with rows of large, subquadrate punctures, those in the sutural row smaller than the others; third, fifth, and seventh interstices feebly elevated. Length, 3·25 mm.

Hab.—Qucensland (Blackburn's collection). Type, I. 15513.

About the size and general appearance of the preceding species, but cephalic impressions different, and antennae, palpi, and tarsi entirely pale (the femora, however, are somewhat darker than the tibiae and tarsi); it is also about the size and with somewhat similar outlines to those of II. horni, but the odd interstices are more noticeably elevated, the prothoracic foveae are larger and the cephalic impressions different; the foveate head is apparently as in H. obscuroaeneus, but that species was described as but 2 mm. in length. On the head the sublateral sulci are fairly we'l defined, but they open out inwardly into the clypeal suture, which between them appears as a rather large fovea, engulfing the median sulcus, and bounded posteriorly by an obtuse carina. From some directions the median fovea of the submedian row, and the two medio-basal ones on the pronotum, appear to be bounded by obtuse costae.

# Hydrochus multicolor, n. sp.

Brightly metallic, under surface velvety-black and grey; antennae (club infuscated), palpi (tips infuscated), and legs (knees and tips of claw-joints blackish) more or less flavous.

Head with large punctures, smaller and denser (but quite sharply defined) on clypeus than elsewhere; with three ill-defined longitudinal impressions between eyes; clypeal suture deep. Prothorax a'most as long as the apical width, which is much more than that of base, sides finely serrated; with seven subfoveate impressions or arcolets: three submedian, and four subbasal, the lateral ones shallowly connected with each other and separated from the median ones by

feeble ridges; with rather dense and coarse punctures. Elytra with regular rows of large punctures, parts of some of the interstices conspicuously elevated. Length, 3:5-4 mm.

Hab.—Victoria: Macedon (H. W. Davey). South Australia: Adelaide (Blackburn's collection). New South Wales: Forest Reefs (A. M. Lea).

Type, I. 8286.

The strong partial elevation of some of the elytral interstices is more pronounced than on any other species before me; on H. victoriae they are much less pronounced and the general surface is very different; the third interstice is strongly elevated near the base only, the fifth strongly at about the apical fourth, and less strongly elsewhere, and the ninth moderately almost throughout, in the middle between the fifth and ninth the surface is somewhat depressed. The head and prothorax are coppery-green or coppery-blue, or almost entirely golden, the clytra are brightly metallic, but less coppery than the prothorax and head; the Forest Reefs specimen has the head and prothorax purplish-blue, with golden or coppery-green reflections; the Adelaide specimen is like the one from Forest Reefs, except that it is less brightly metallic. On several specimens the median sulcus of the head is scarcely traceable, and the others are not much more distinct, but on the most brilliant specimen all three sulci are quite well defined.

### Hydrochus simplicicollis, n. sp.

Bright metallic bluish-green, elytra with coppery and violet reflections; under surface velvety-black and grey; antennac, palpi (tips infuscated), and tarsi

reddish-flavous.

Head with three distinct longitudinal impressions between eyes; punctures irregularly distributed, becoming denser on clypeus. Prothorax about as long as the basal width, which is much less than that of apex; with sharply defined but somewhat irregularly distributed punctures, somewhat larger than those

between eyes; without subfoveate impressions or arcolets. Elytra with regular rows of punctures; the interstices regular, except for the slight curvature of the seventh, eighth, and ninth about middle. Length, 2.25 mm.

Hab.—Queensland: Cairns district (A. M. Lea). Type, I. 8287.

The colour is apparently as in *H. laeteviridis*, but the head on the two specimens before me is quite distinctly longitudinally trisulcate. The clypcus is gently

convex throughout instead of rather strongly convex in the middle.

A specimen from New South Wales (Jenolan, J. C. Wiburd) probably belongs to the species, but its upper surface is less brightly metallic, the longitudinal impressions on the head are less distinct, the usual seven impressions on the pronotum are faintly indicated, and part of the fifth elytral interstice is feebly elevated above the adjacent ones. A specimen from Queensland (Bowen, Aug. Simson) possibly also belongs to the species, but is larger (2.5 mm.), its prothorax and elytra are somewhat reddish, with slight metallic reflections, cephalic sulci indistinct (traceable only from a few directions), and prothorax with denser and coarser punctures, with a fairly distinct submedian fovea and others very faintly indicated. Quite possibly, however, additional specimens would indicate that it should not be referred to this species.

# Hydrochus scabricollis, n. sp.

Black, shining, parts of appendages reddish, under surface velvety-black and

grey.

Head with three short, conspicuous inter-ocular sulei, clypeal suture deep; clypeus rather strongly convex, and with dense but not very large punctures. Prothorax much wider at apex than at base; coarsely granulate-punctate; with

seven fairly large and rough foveae: three submedian and four subbasal, the two medio-basal ones partly conjoined. Elytra with regular rows of large, subquadrate punctures, the odd interstices feebly elevated, but the elevation of the third scarcely traceable. Length, 2·25-2·5 mm.

Hab.—South Australia: Parachilna (H. M. Hale), Lucindale (F. Secker).

Type, I. 15511.

A minute black species, with prothoracic sculpture unusually coarse; it is slightly smaller than the average size of the species identified and tabulated by Blackburn as H. australis, and the prothorax with decidedly coarser sculpture, elytra shining black, etc.; the original description of australis, however, is but a brief comparison with an ex-Australian species, and there is nothing to prove that Blackburn's identification was more than a guess. Parts of the antennae are obscurely pale, the palpi are almost entirely dark, the legs are more or less reddish or obscurely flavous, with the knees and tips of claw joints blackish, occasionally the femora are almost entirely infuscated; the head appears to have four short costae between the eyes, owing to the deep sulci, clypeal suture, and to the depression at the neck.

### Hydrochus obsoletus, n. sp.

Black, with a faint purplish gloss; under surface velvety-black and grey; antennae (club slightly infuscated), palpi (tips infuscated), and legs (tips of

c'aw joints infuscated) flavous.

Head with moderately dense, sharply-defined punctures, smaller and denser on clypeus than elsewhere; clypeal suture narrow and ill-defined, inter-ocular impressions very feeble. Prothorax more convex in middle of apex than usual, apex much wider than base, sides finely serrated; with rather dense and coarse punctures and shallow subfoveate impressions. Elytra with regular rows of large punctures; third, fifth, seventh, and ninth interstices feebly elevated in parts. Length, 2.5 mm.

Hab.—New South Wales: Albury (Blackburn's collection). Type, I. 8255.

The inter-ocular sulci are traceable from some directions, but well defined from none, the median one is particularly weak. The prothorax is more convex in the middle of apex than is usual, it has three feeble but traceable subfoveate impressions, slightly in advance of the middle, but of the subbasal row the outer ones are feeble, and the median ones scarcely traceable from any direction. It is not very close to any other species before me, but approaches *H. simplicicollis*.

# Hydrochus granicollis, n. sp.

Ficeous-brown, head black with a dark metallic-green gloss, under surface velvety-brown and grey; antennae (club slightly infuscated), palpi (tips infuscated), and legs (knees and tips of claw joints slightly infuscated) pale castaneo-flavous.

Head coarsely granulate-punctate, punctures smaller and more crowded on clypeus than clscwhere; clypcal suture curved and well defined, three inter-ocular grooves shallow and faint, but traceable from some directions. Prothorax much wider at apex than at base, sides rather strongly rounded near apex, finely serrated throughout; coarsely granulate-punctate; with seven subfoveate impressions: three submedian and four subbasal, of the latter the two median ones are less defined than the others. Elytra with regular rows of large punctures, the odd interstices slightly but distinctly elevated. Length, 2·25-4 mm.

Hab.—New South Walcs: Wahroonga (H. J. Carter). Type, I. 15515. The prothorax has the rough granulate appearance of that of *H. victoriae*, but the head is wider, the elytral punctures more sharply defined, and the alternate

interstices more evenly elevated. The larger of the three specimens taken by Mr. Carter has the prothorax almost as dark as the head (but not metallie), and the elytra not much darker.

### Hydrochus insularis, n. sp.

Black, with a slight purplish gloss; under surface velvety-brown and grey; antennae, palpi (tips infuseated), and legs (knees and tips of claw joints infuseated) of a rather dingy flavous or testaceous.

Head rather coarsely granulate-punctate, punctures somewhat smaller and denser on elypeus than elsewhere; inter-ocular sulci feebly defined, elypeal suture rather wide but shallow. Prothorax much wider at apex than at base, sides finely serrated; rather coarsely granulate-punctate, with seven more or less obscure subfoveate impressions: three submedian and four subbasal. Elytra with regular rows of large subquadrate punctures; odd interstices somewhat elevated. Length, 2·25-2·5 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15512.

A small, obscurely metallic species, about the size of H. interioris, but punctures not quite as coarse, and third interstice of elytra elevated as well as the other odd ones; in some lights the scutellum has a metallic-green gloss. It is smaller than the species identified by Blackburn as H. australis, and the alternate interstices are slightly but distinctly elevated. It is about the size of H. obscuroaeneus, but the cephalic and prothoracic impressions are not as in the description of that species. Even when the head has been carefully cleaned its longitudinal impressions are rather indistinct, and when at all dirty the head appears to be without inter-ocular sulci; mud also obscures the prothoracic impressions on most of the (five) specimens obtained on the island.

#### PSELAPHIDAE.

### Palimbolus incisus, n. sp.

&. Reddish-castaneous; head, prothorax, and antennae (except apical joint) darker. Rather densely clothed with short, pale pubescence.

Head rather clongate, with two small inter-ocular foveae and a longitudinal impression in front; with dense and small punctures. Eyes prominent. Antennae elongate, first joint cylindrical, as long as three following combined, second to seventh slightly longer than wide, eighth subglobular, ninth and tenth larger, their combined length about equal to that of the eleventh, and with it forming a club. Palpi large, apical joint as long as first joint of antennae, and somewhat stouter in middle. Prothorax strongly convex, slightly longer than wide, widest at apical third; with three small foveae near base, one in middle and a larger one on each side; punctures rather small but sharply defined. Elytra about one-fourth longer than prothorax, and at widest (near apex) almost twice its greatest width, with a narrow complete stria on each side of suture, and one extending to about the middle from the base, half-way between suture and shoulder, each stria starting from a small fovea; punctures somewhat larger than on prothorax. Abdomen with upper surface of subapical segment carinated along middle, and with a large fovea on each side, its under surface with a series of shallow depressions. Metasternum with a large horse-shoe shaped impression, bounded by a narrow carina. Legs long; front trochanters and base of front femora acutely dentate, middle femora moderately dentate in middle, upper surface of hind femora deeply incised at basal third; tibiae thin, hind ones each with a thin spur marking the base of a notch at about the apical fifth on the under surface, upper surface with two narrow ridges. Length, 2.75-3 mm.

Q. Differs in having somewhat shorter antennae, subapical segment of abdomen simple, metasternum with depression shallower, not horse-shoe shaped, and open at both ends, hind femora not incised, hind tibiae unarmed and without ridges on upper surface.

Hab.—Oueensland: National Park in December (H. Hacker). Type in

Queensland Museum; cotype, I. 12293, in South Australian Museum.

Distinct from all previously named species by the hind legs of the male; the armature of the front legs is alike on both sexes.

#### Palimbolus metasternalis, n. sp.

&. Reddish-castaneous, elytra, legs (knees excepted), and palpi paler. Clothed with short pale pubescence, and with more or less erect darker hairs.

Head rather elongate, with an interrupted longitudinal impression in middle. a small fovea near each eye; with sparse, irregularly distributed punctures. Antennae moderately long, first joint slightly curved, as long as two following combined, second to sixth about as long as wide, seventh and eighth subtrapeziform, ninth and tenth larger, and forming a club with the still larger eleventh. Prothorax strongly convex, slightly longer than the greatest width (at apical third); with three foveae at basal third, filled with golden pubescence and connected with the base, and one on each side at apical third, the latter invisible from above; with sparse and small punctures. Elytra with a narrow stria on each side of suture, and an oblique impression near each shoulder; punctures minute. Abdomen widely depressed in middle of under surface, subapical segment with a large excavation, bounded on each side by an oblique ridge, four of the segments with a fascia of golden pubescence on each side. Metasternum largely depressed in middle, each side between coxae with a subacute tooth. Legs moderately long; hind trochanters acutely dentate; hind femora much stouter than the others; hind tibiae with a conspicuous V-shaped notch at apex. Length, 3 mm.

Hab.—New South Wales: Dorrigo (W. Heron). Type (unique), I. 12295.

Allied to *P. mirandus* and *P. victoriae*, but spur to hind tibiae differently placed and causing the apex to appear to be notched like a V, the hind trochanters are armed, but not the middle ones, and the metasternum also is armed.

# Palimbolus unguiculatus, n. sp.

3. Reddish-castaneous; elytra (except suture and apex), legs (except knees), and palpi paler. Clothed with pale pubescence and suberect hairs.

Head rather elongate, with a deep narrow impression in front, a fairly large fovea near each eye; punctures irregularly distributed. Antennae rather elongate. first joint cylindrical (except for a slight incurvature near base on upper surface) and as long as second and third combined, second to eighth about as long as wide, ninth and tenth larger, their combined length about equal to eleventh, and with it forming a club. Apical joint of palpi stouter and longer than basal joint of antennae. Prothorax about as long as greatest width, subangularly dilated near apical third, at about basal third with three foveae, the median one connected with the base, each lateral one also connected with the base, and rather obscurely with a small apical fovea, which is invisible from above; punctures sparse and small. Elytra with a narrow stria on each side of suture, and an oblique depression near each shoulder; punctures sparse, small, and irregularly distributed. Abdomen wide, under surface widely depressed in middle, subapical segment with a large depression. Metasternum widely and shallowly depressed in middle. Legs long; hind trochanters acutely dentate; hind tibiae twice notched on the inner side; inner front claw acutely trifid. Length, 2.75 mm.

Hab.—Victoria: Alps (Blackburn's collection). Type (unique), I. 12294.

Of the notches on the hind tibiae the first is at the middle, and its outer end is marked by a small acute projection, the second is smaller and slightly nearer the apex than the first; in *P. leanus* there are two processes on the hind tibiae but they are considerably larger, truncated, and differently placed; the middle tibiae on the present species are also much longer, thinner, and conspicuously curved, the antennac are longer and thinner and the palpi are stouter. The notch on each of the hind coxae is so placed that, from some directions, it, as well as the trochanter, appears to be armed.

In addition to the present species, one of the front claws is trifid in the male in P. dimidiatus, elegans, frater, leanus, mirandus, and victoriae, and probably

in others.

#### SILPHIDAE.

### Clambus semiflavus, n. sp.

Black and flavous. Upper surface glabrous, under surface finely pubescent. Prothorax and elytra with minute punctures, a very faint stria on each side of suture. Length, '75 mm.

Hab.—Northern Queensland (Blackburn's collection). Type, I. 15985.

The type has the head, prothorax, antennae, and legs bright flavous, the other parts being intensely black; a second specimen differs from it in having the prothorax flavous at the apex only, but otherwise agrees well with it. Under a microscope the elytra are seen to have numerous small punctures, and a very fine stria on each side of and very close to the suture, but the punctures are just discernible under a lens, and the striae not at all.

#### SCARABAEIDAE.

# Ataenius latericollis, n. sp.

Black, shining, sides of clypeus, palpi, and lcgs reddish, antennac paler. Head strongly convex, with moderately dense, sharply defined, but rather small punctures at base, becoming very small in middle, and coarser or subgranulate in front; sides of clypeus shining, and almost impunctate. Prothorax about twice as wide as long, sides feebly rounded, front angles rounded and slightly produced, hind ones obtuse, lateral and basal margins moderate; with numerous sharply defined, but rather small punctures, becoming very small in front, but moderately large and crowded on a distinct depression near each front angle; between depression and base a shining, almost impunctate space. Elytra parallel-sided to near apex, shoulders very feebly armed; striate-punctate, interstices evenly convex, wider than striae, crenulate internally, but on apical slope narrower than striae. Metasternum with a narrow median stria, deep at each end but shallow in middle, no punctures near it, a shallow oblique impression almost without punctures near each hind coxa, sides with sparse punctures, but becoming dense near base. Mesosternum with a very narrow ridge on intercoxal process. Length, 3-3.25 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15449. A small, strongly convex species, of which twelve specimens were obtained on the island; the general outlines are somewhat as on A. parvus, but that species has much sparser prothoracic punctures, and its head is not subgranulate in front. On several specimens the sides of the prothorax, tips of elytra, and their epipleurae, are obscurely reddish, on two the elytra and under surface are entirely reddish, and a greater portion of each side of the prothorax. From some directions the shining impunctate space on each side of the prothorax appears subtuberculate, somewhat as in A. tweedensis, and A. nudus, but it is much smaller than those

species, and the head is subgranulate. The median stria of the metasternum can usually be traced throughout, but from some directions it appears to vanish in the middle.

A specimen from Connexion Island and one from Normanton probably belong to the species, but are larger (3.5 mm.), sides of clypcus narrower and less shining, shining space on each side of prothorax less defined, and with rather large and conspicuous punctures.

#### Heteronyx insularis, n. sp.

Dark castaneous-brown, parts of lcgs somewhat paler, antennae and palpi still paler. Densely clothed with short, depressed pubescence; sides, under surface,

and legs with hairs or bristles.

Head with frons and clypeus on an even plane, and similarly densely granulate-punctate; clypeus with apex moderately incurved to middle, the labrum concealed from a slightly oblique point of view. Antennae eight jointed. Prothorax not twice as wide as long, sides strongly rounded, front angles acute and somewhat produced, hind ones almost rectangular; with dense and small, but not confluent punctures. Elytra with punctures much as on prothorax, subsutural and sublateral striae fairly distinct, the others very faint or absent; apical membrane short. Pygidium with somewhat sparser and larger punctures than on elytra. Hind coxae at sides the length of metasternum; claws appendiculate. Length, 10-10-5 mm.

Hab-Northern Territory: Groote Evlandt (N. B. Tindale). Type, I. 15485. At first glance this species somewhat closely resembles II. xanthotrichus (Group 8), but it is quite certainly a member of Group 2, although it appears to have no close allies in it: in Blackburn's table of that group it could be placed in A, BB, C. Of the two species of C, it differs from II. torvus in not being black, in the incurvature of apex of clypeus, prothoracic punctures much smaller and denser, apical membrane of clytra much shorter, etc.; from H. hispidulus it differs in being smaller, with much smaller, denser, and very different punctures, in the clypeus, clothing, etc. There are no erect hairs on the disc of the prothorax or elytra, the prothorax has a rather long fringe on each side, and a few hairs (abraded from most of the specimens) across the apex; the lateral fringe on each elytron becomes shorter posteriorly, and terminates level with the side of the pygidium, on the pygidium there are a few erect setae in addition to the pubescence; the hairs on the metasternum are fairly dense and soft (contrasted with the stiff bristle-like ones about the shoulders). The appendix to each claw is large and more or less membraneous, a narrow notch intervenes between it and the hooked tip; on the front tarsi of the male the membrane is larger and more conspicuous. Two females are much paler (rather pale castaneous) than two other females and a male.

#### Heteronyx irrasus, n. sp.

Dark piceous-brown, almost black, the elytra obscurely paler than the rest of the upper surface, legs obscurely reddish, antennae somewhat paler. With rather long, sloping, and not very dense pubescence, interspersed with numerous

erect hairs, lateral fringes rather long.

Head with frons feebly scparately convex; with dense (but not confluent) large punctures, the interspaces with minute ones; clypeus with crowded and smaller granulate punctures; labrum (as seen from behind) scarcely half the width of a lateral lobe. Antennae eight jointed. Prothorax more than twice as wide as long, sides moderately rounded, front angles slightly produced, hind ones gently rounded off; punctures (for the genus) rather sparse, nowhere confluent, much smaller than on head. Elytra with large rough punctures, the interspaces

with minute ones, subsutural and sublateral striae only fairly distinct; apical membrane rather short. Pygidium shagreened and with fairly large but rather indistinct punctures. Hind coxae at sides longer than metasternum; claws acutely

bifid. Length, 7.5-7.75 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15486. The claws are distinctly bifid, so the species can only be referred to Blackburn's Group 5, and there it would be associated with H. capillatus and H. placidus, from both of which it is distinguished by its much smaller size; its prothoracic punctures are somewhat as in placidus, but the sides of the clypeus are more rounded, and the punctures on the frons are less crowded. There are specimens in the Museum of all the species referred by Blackburn to Group 5, and it is not close to any of them. The clytral punctures are larger than those on the head, but sparser, many of them are squamose (as defined by Blackburn), and a few in places are feebly transversely confluent. Two specimens were obtained.

### Heteronyx glaber, n. sp.

Pale castaneous and shining, elytra, abdomen, antennae, palpi, and parts of legs flavous, or pale flavo-castaneous; suture, extreme margins of prothorax, knees, and some narrow parts of legs dark (occasionally almost black). Pro-

thorax and elytra fringed, rest of upper surface glabrous.

Head gently convex between eyes, with small and sharply defined punctures, nowhere crowded together; clypeus roughly granulate, suture rather strongly arched backwards in middle; labrum almost or quite as wide as a lateral lobe. Antennae nine jointed. Prothorax more than twice as wide as long, sides evenly rounded, front angles moderately produced, hind ones gently rounded off; punctures somewhat sparser, but otherwise much as on head. Elytra with sharply defined punctures of moderate size, and nowhere crowded, although denser about apex than elsewhere; subsutural and lateral striae distinct; apical membrane very short. Pygidium with punctures much as on head but more crowded. Sides of hind coxae distinctly louger than metasternum, and with somewhat larger and sparser punctures; claws acutely bifid. Length, 5-6·5 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale) Type, I. 15487. A small, pale, highly polished, glabrous species, which in Blackburn's table of Group 7 would be associated with H. viduus, to which it is certainly very close, but from which it differs in being of a smaller average size, in having smaller punctures on the prothorax, and the third tooth of the front tibiae smaller (almost reaching the vanishing point, although acute). The smooth frons in strong contrast with the granulated clypeus is as in H. viduus, and several allied species; H. pauxillus, which also occurs on the island, differs in having considerably larger punctures on the prothorax and elytra, and the clypeal suture not angularly drawn backwards in the middle. Most of the metasternum is glabrous, each of the visible abdominal segments has a row of stiff setae, continuous across the middle in male, interrupted there in the female. The labrum when viewed obliquely from behind appears to be slightly elevated above the clypeus, when viewed at a right angle from above its front face appears to be very feebly incurved to the middle. Nearly fifty specimens were obtained, and they vary slightly in colour, but the clytra are always paler than the rest of the upper surface.

# Heteronyx minimus, n. sp.

Flavous and shining, elytra slightly paler than the rest of upper surface. Upper surface glabrous, except for straggling lateral fringes.

Head with sparse and small punctures on frons; clypeus roughly granulate, suture almost straight; labrum almost as wide as each lateral lobe. Prothorax.

elytra, pygidium, hind coxae, and claws as described in preceding species. Length, 3:5-4 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15488.

The smallest known species of the genus. In Blackburn's table of Group 7 it would be associated with *H. pauxillus*, from which it differs in its much smaller size and finer prothoracic punctures; although only three specimens of that species were known to Blackburn, I have seen over a dozen, and the differences noted are constant; *H. lividus* is not much bigger, but has much coarser punctures on the frons and pronotum. Structurally it is close to the preceding species, but is paler, the size is consistently smaller, and the clypeal suture is almost straight. The clypeus usually has a slightly more reddish appearance than the frons. Nineteen specimens were obtained.

### Heteronyx distortus, n. sp.

3. Of a rather dingy, pale flavo-castaneous, elytra, abdomen, and antennae paler. Prothorax and elytra with straggling lateral fringes, rest of upper surface

glabrous or almost so.

Head with frons gently convex and subopaque; with small but sharply defined punctures; clypeus granulate-punctate in middle, with sparse punctures at sides, suture almost straight; labrum about three-fourths the width of a lateral lobe. Antennac nine jointed. Prothorax opaque, more than twice as wide as long, sides strongly rounded, front angles slightly produced, hind ones rounded off; punctures minute, only the piliferous lateral ones at all distinct. Elytra with sharply defined and mostly rather small punctures, fairly dense about apex, but sparser clsewhere; subsutural and lateral striae distinct, faint remnants of others traceable. Pygidium subopaque and sparsely punctate. Sides of hind coxac about as long as metasternum, and with much sparser punctures; third tooth of front tibiae very small; claws appendiculate, front ones enlarged and asymmetrical. Length, 6-7.5 mm.

Q. Differs in having denser and somewhat coarser punctures on head, abdomen more convex, front claws normal, and hind tarsi differently setose.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Typc, I. 15489. Belongs to Blackburn's Group 8, and has remarkable claws much as on H. scutatus, but is a consistently much smaller species (9 of the present form and 26 of that one are before me) and narrower, with the prothorax (unless greasy) quite opaque. It has the general appearance of H. pauxillus (Group 7). At first glance the elytra (except for the fringes) appear to be glabrous, but when viewed from the sides remnants of pubescence may usually be seen on the apical slope; on several specimens, however, the disc is certainly glabrous, but probably owing to abrasion; there are a few hairs on the metasternum and a row of bristlelike ones across most of the abdominal segments. The appendix to each claw is large and its apex is not far from rectangular (from some directions, however. the claws appear bifid), but on the male the front claw joint is ridged along middle, the ridge appearing subspinose at apex, its outer claw is somewhat larger. but otherwise much as those on the other tarsi, but the inner one is greatly enlarged, set at a different angle, suddenly bent backwards, and with a large and differently formed appendix; the hind tarsi of the female has, proceeding from the upper apex of the third and fourth joints, two or three stout curved bristles (much stouter than those on the under surface), the claw joint usually has one, so that it appears to have one simple claw and two appendiculate ones. Five specimens were obtained on the island, and Mr. J. Clark sent for examination four others taken by Mr. W. Crawshaw at Wyndham.

### Haplonycha longipalpis, n. sp.

Dark castaneous-red with a slight prinnose gloss, elytra flavous and slightly iridescent, suture and margins darker. Sterna and base of abdomen with rather dense pale hair, prothorax with a lateral fringe of long hairs; pygidium with rather sparse long setae, or short hairs, and an apical fringe.

Ilead with dense, sharply defined punctures, coarser near elypeal suture than elsewhere, the intervening spaces with minute punctures; clypens with sparser punctures than on rest of head, and coarsest near its suture. Antennae nine, club three jointed, joints of the club slightly longer than five preceding joints combined. Palpi unusually long, apical joint thin, about as long as basal joint of antennae, with a narrow, distinct impression on its upper surface near base, penultimate joint slightly shorter than antepenultimate. Prothorax about thrice as wide as the median length, sides strongly rounded, front angles acute and moderately produced, hind ones rounded off; with sparse and small punctures; lateral gutters rather wide and filled with piliferous punctures; apical membrane rather long at the sides, short in middle. Elytra with sides rather strongly rounded and widest at about the basal two-fifths; punctures rather small; each with four distinct but feebly elevated discal costae, marking the positions of geminate striae, containing not very closely placed punctures. Pygidium unusually wide, strongly convex in middle, thence moderately ridged to apex. Basal joint of hind tarsi slightly shorter than second. Length, 32 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15475.

The lateral gutter of its pronotum "filled with closely-packed setiferous punctures (especially round hind angles)" renders it certain that this species should be referred to Blackburn's Group 2; the lateral fringes on the prothorax of the type are somewhat abraded, but the species is very distinct from H. latebricola, H. trichopyga, H. crassiventris, and H. punctulata by the apical joint of its palpi, this is unusually long and thin, with a basal depression; from all the previously described species of Group 3 (apart from the prothorax), it differs in its much greater size. In general appearance it resembles H. latebricola (Group 2), H. colossa (Group 4), and H. gigantea (Group 5). The elytra have a complete downward projecting fringe of very short golden setae, and an outward projecting one (not traceable across apex) of longer, reddish setae, becoming rather short posteriorly.

Haplonycha tindalei, n. sp.

Palc reddish-castaneous, head somewhat darker, elytra (sides and suture narrowly excepted) and abdomen flavous, some marginal parts of legs blackish.

Sterna moderately pilose.

Head with fairly large and dense punctures, more crowded about clypcal suture than elsewhere, the latter distinctly bisinuate. Antennae nine, club four jointed, fifth joint acutely produced internally; club about as long as three basal joints combined. Palpi with apical joint rather long and cylindrical, antepenultimate joint slightly longer and stouter than penultimate. Prothorax scarcely more than thrice as wide as the median length, sides strongly rounded, front angles acutely produced, hind ones rounded off; punctures close behind the subapical furrow about as large as the inter-ocular ones, but shallower and sparser elsewhere; apical membrane moderately long at sides, very short in middle. Elytra widest at about basal two-fifths; with fairly dense, sharply defined punctures, the geminate rows well defined, the space between each pair very feebly elevated and impunctate or almost so; suture briefly mucronate. Pygidium rather strongly convex, ridged posteriorly, surface faintly wrinkled, and with small and very small punctures; propygidium shagreened and opaque, but shining and with

distinct punctures near suture. Basal joint of hind tarsi distinctly longer than second. Length, 20-23 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15478.

In Blackburn's table of Group 5 belongs to AA, BB, CC, but I cannot follow his D and DD (the edging to the basal and lateral gutters on the pronotum is practically even throughout, although the gutters themselves are wider at the front angles and position of the hind ones than elsewhere); of all the species he referred to DD there are specimens in the Museum, and it is certainly different from all of them; if referred to D it would probably be associated with H. arvicola (its prothoracic punctures are certainly much sparser and somewhat smaller than on H. rustica) from the description of which it differs notably in its constantly bicoloured upper surface. The prothorax has a few hairs in the lateral gutters, but they are so sparsely spaced that they could not be regarded as forming a fringe; on the apparent basal segment of abdomen there is a row of setiferous punctures, that extends across the segment, each of the three following segments has a remnant only of a row on each side; the fringe on each side of the elytra is composed of reddish, rather distantly placed setae; the pygidium, except for a few apical hairs, is quite glabrous; the hind coxae have sharply defined and mostly setiferous punctures. The sexes differ but little externally, in the male the joints of the club extend backwards to well beyond the middle of the basal joint of antennae, in the female they scarcely pass its tip. Specimens were taken abundantly at lights, during the wet season, and relished by a flying phalanger in captivity.

### Haplonycha bidentipes, n. sp.

Pale reddish-castaneous, elytra (suture and margins excepted) and parts of under surface of a rather dingy flavous. Sterna (for the genus) sparsely pilose, a feeble fringe of hairs on each side of prothorax, elytra with outward projecting fringe of setae rather distantly spaced, the basal setae fairly long, becoming short posteriorly; downward projecting fringe very short and inconspicuous; four segments of abdomen each with a transverse row of setiferous punctures; pygidíum with fringing hairs only.

Head rather convex and with sparse and minute punctures; clypeus rather shorter than usual, middle of base obtusely elevated (the part of the head immediately behind it depressed); punctures very sparse and small, suture strongly bisinuate; front face very short (only about half the length of labrum) and with isolated, setiferous punctures. Antennae nine, club three jointed. Apical joint of palpi rather thin, penultimate joint slightly shorter than antepenultimate. Prothorax scarcely four times as wide as long, sides strongly and evenly rounded, front angles produced and somewhat acute, hind ones rounded off; punctures small and rather sparse; apical membrane rather short near eyes, very short elsewhere. Elytra somewhat dilated to beyond the middle; punctures (including those in the geminate rows) well defined and rather numerous; suture unarmed. Pygidium with dense and minute punctures, or somewhat coarsely shagreened. Front tibiae strongly and acutely bidentate; hind tarsi with two basal joints almost equal. Length, 9·5-11 nm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, 1, 15483.

Almost the smallest of the genus, and looking somewhat out of place in it. but by Blackburn's generic table of the Melolonthides  $^{(3)}$  it could only be referred to Colpochila (=Haplonycha); the complete absence (even of a faint undulation at its position) of a third tibial tooth, may be regarded as a generic feature.

<sup>(3)</sup> Blackb., Trans. Roy. Soc. S. Austr., 1898, p. 32.

although in many species of the genus it is quite small. (4) There are but few punctures across the front face of the clypeus, and as they are not confused by other punctures there need be no hesitation in referring the species to Blackburn's Group 7, where it would be associated with *H. testaceipennis*, to which, however, it is not at all close. The prothorax, scutellum, and elytra are finely and evenly shagreened, and moderately shining, the head behind the clypeal suture is less evenly shagreened and slightly more shining, the clypeus is non-shagreened and polished. The obtuse median elevation, of the clypeus, is rendered more conspicuous by a depression on the head immediately behind the suture. The joints of the club are slightly longer than the three basal joints of antennae in the male; in the female they are slightly shorter than those joints; these apparently being the only external indications of sex. Numerous specimens were obtained.

### Haplonycha minuta, n. sp.

&. Reddish-castaneous and with a slight pruinose gloss; elytra and abdomen paler, but suture, sides, and base of the former coloured as scutellium. Sterna

with fairly dense pale hairs.

Head with dense and moderately large punctures, sparser on clypcus than between eyes. Antennae nine, club three jointed, joints of club as long as rest of antennae. Apical joint of palpi rather long, flattened and subopaque on upper surface near base, penultimate joint shorter than antepenultimate. Prothorax between three and four times as wide as the median length, sides inflated and strongly rounded towards base, front angles slightly produced, hind ones widely rounded off; punctures considerably sparser and smaller than on head, a row of sparse piliferous punctures in each lateral gutter; apical membrane very short, even near eyes. Elytra with well-defined geminate rows of punctures, the interstices, except between the geminate pairs, with fairly numerous ones, but becoming irregular and somewhat crowded posteriorly; subsutural stria rather deep. Pygidium rather strongly convex; with fairly numerous, but not very sharply defined punctures. Two basal joints of hind tarsi subequal. Length, 10 mm.

9. Differs in being larger (10.5-11 mm.), somewhat wider posteriorly, joints of club shorter than rest of antennae, and pygidium with an obtuse, shining, median elevation.

Hab,—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15484.

The ocular canthi cutting well into the eyes, and the base of prothorax narrowly margined throughout, exclude this species from Petinopus and Neso, so at present it can only be referred to Haplonycha, despite its small size. It differs from H. bidentipes in being more convex, darker, front tibiae tridentate, head with larger and crowded punctures, etc. The front face of the elypeus has a row of large, distinct, piliferous punctures, but on the sides there are many others, the front face also has numerous smaller, but sharply defined punctures; so that the characters given by Blackburn for his Groups 6 and 7 do not exactly apply, and in fact very few of the species that quite evidently belong to F, of his table, exactly fit either 6 or 7. The outward projecting row of setae or hairs on each side of the elytra is distinct, but there is no trace of a downward projecting fringe, or fine membrane; the propygidium is rather densely pubescent, and there are remnants of pubescence on the pygidium; the tip of the latter is conspicuously fringed. Seen obliquely from behind, the base of the clypcus appears conspicuously elevated above its suture, especially in the middle. The sixth joint of antennae is very short, and could easily be overlooked. The elytra of the male,

<sup>(4)</sup> In Glossocheilifer bidentatus the front tibiae are also bidentate, but on that species the labrum is produced, this being its only generic distinction from Haplonycha.

as viewed from above, appear to be parallel-sided to near the apex, but from the sides they appear widest at the basal third, and thence rather strongly narrowed to apex. The pygidium is opaque, and as a result its punctures are somewhat masked. Five specimens were obtained on the island.

Form 2. Six specimens from Melville Island (W. D. Dodd) probably represent another form of the species; they differ in having the elytra somewhat darker, so that the bicoloured appearance of the upper surface is less conspicuous, the head has more crowded punctures, the clypeus is less conspicuously elevated at the middle of its base, the pygidium of the female is without a distinct submedian elevation, and is shining and with distinct punctures throughout; the smaller punctures on the front face of its clypeus are very few in number (so that it could fairly be regarded as belonging to Blackburn's Group 7), and the coarse lateral ones are larger.

Form 3. Five specimens from Darwin (N. Davies), probably represent another form of the species. They are smaller (8.5-9.5 mm.), and somewhat darker (although the elytra are still not quite as dark as the rest of the upper surface); the clypeus is not at all elevated at the base, although its suture is deep and well defined; the clytral punctures, both in the rows and on the interstices, are somewhat larger than on the other forms. The pygidium and the front face of the clypeus are much as on Form 2.

In Blackburn's generic table of the Sericoides (5) the character "Elytra geninate-striate" needs some amplification; on some species of Colpochila (=Haplonycha), and occasionally in other genera, the elytral punctures are sometimes in double rows, but the rows are not necessarily in striae, the punctures being separately impressed at more or less regular intervals; on some species the striae are well defined, but contain no punctures. On the present species the rows of punctures are quite well defined (although the distance separating the rows of each pair is more than is usual in the genus, rendering the gemination less conspicuous), but the striae (except the subsutural one) are very slightly impressed in parts, and not at all elsewhere.

### Lepidiota flavipennis, n. sp.

Dark brown, almost black, shining, antennae, palpi, and Iegs castaneous, abdomen paler, club of antennae and elytra flavous, suture infuscated. Clothed with snowy-white scales, front part of metasternum, in addition, with long pale hairs; legs with rather sparse hairs and white scales.

Head with rather large punctures, somewhat unevenly distributed, the intervening spaces with minute ones. Clypcus short, rather feebly bilobed, margin moderately upturned. Club of antennae rather small. Apical joint of palpi rather long, tip not hooked, upper surface with an elongated, flat (but not concave), opaque space. Prothorax rather long, sides almost acutely dilated slightly nearer base than apex, obtusely crenulated, front angles slightly obtuse, hind ones more strongly so, front and hind margins not elevated; with large, irregularly distributed punctures, and a few minute ones. Elytra almost parallel-sided to near apex, suture narrowly raised and slightly produced at tips; punctures almost evenly but sparsely distributed; derm in places feebly wrinkled. Propygidium with a bisinuate depression marking the tips of elytra, beyond this with dense and small punctures; pygidium with sparser and larger punctures and some minute ones. Front tibiae strongly tridentate, median tooth very slightly nearer third than first. Length, 19-20 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15472.

<sup>(5)</sup> Blackb., Trans. Roy. Soc. S. Austr., 1898, p. 33.

Structurally close to L. darwini, but the propogidium has a conspicuous impression, continuing the line of the junction between the upper and lower surfaces of abdomen; the hind parts are also much less densely clothed; on that species they are so plated with scales that it would be difficult to put another one on without its overlapping others, on the present species their clothing is more of the nature of depressed setae, which are rather thinly scattered over the surface; the palpi also differ. Few of the scales are quite circular; on the head each is contained within a large puncture, on the prothorax they are larger than elsewhere, dense on the sides and parts of the base and apex, crowded in the hind angles, and sparse elsewhere, much of the discal portion being glabrous; they are rather sparse but almost evenly distributed on the elytra, dense and small on the propygidium, much sparser and thinner on the pygidium, whose tip has a few hairs or thin setae, closely cover the sterna and hind coxac, and are deuse on the abdomen, except adjacent to its sutures; the outer edges of the elytra are fringed with thin white scales or short setae, giving them, in some lights, a finely serrated appearance. The large punctures are almost absent from the middle of the clypcus, and from some other parts of the head. Three specimens were obtained.

### Lepidiota lepidosterna, n. sp.

Blackish-brown, some parts quite black, parts of elytra obscurely paler, antennac, palpi, and parts of legs castancous. With snowy-white scales, moderately clothing the upper surface, denser on the hind parts, and completely plating the sterna, hind coxae and most of the abdomen; legs with sparse hairs, the

femora with rather dense scales, and almost hairless.

Head with coarse, crowded punctures, but almost absent from middle of clypeus, where, however, the surface is finely wrinkled and with dense and minute punctures. Club of antennae rather small. Apical joint of palpi rather long and thin, its tip uot hooked, upper surface with a feeble, elongate, sub-opaque space. Prothorax rather long, sides strongly dilated and widest slightly nearer base than apex, obtusely crenulated, front angles acutely produced, hind ones obtuse but not at all rounded off, basal and apical margins not elevated: with fairly dense punctures, becoming crowded towards sides. Elytra with sides moderately dilated about middle; with rather dense and fairly large punctures. many of which are obliquely or transversely confluent, owing to wrinkling of the derm. Hind parts with dense punctures; pygidium faintly shagreened. Front tibiac strongly tridentate, middle tooth slightly nearer third than first. Length, 17 mm.

Hab—Northern Territory: Groote Eylandt (N. B. Tindale). Type, 1, 15473. With the general appearance of L. rothei, but on all the many specimens of that species before me, the propygidium is clothed only on its lower part; on the present species it is conspicuously clothed throughout; it differs from L. grata in being smaller, elypeus less strongly bilobed, punctures of pygidium not quite so crowded, and clothing of propygidium changing from scales to setae quite close to base, instead of near apex; L. degener is a smaller species, with sides of prothorax strongly crenulated, and less angularly dilated in the middle. There are no hairs on any part of the sterna, on which the scales have a beautiful pearly lustre, they are rather wider there and on the abdomen than on other parts, but few of them are quite circular; on the left side only of the abdomen, and on parts of the pygidium of the type, some of the scales have a yellowish stain. The punctures on the head are imusually coarse, especially adjacent to the clypcal suture, but on the clypeus itself there are less than thirty of them; on the type part of the normally concealed base of head is exposed, and is seen to be highly polished and with small sparse punctures.

### Liparetrus simulator, n. sp.

Black, prothorax with a slight metallic gloss; elytra flavous, base, apex, suture, and sides black or blackish; antennae (club partly infuscated), palpi. most of front legs and pygidium reddish. Under surface with dense whitish hair, propygidium and other parts of abdomen with dense white pubescence as well, head between eyes and prothorax with rather dense hair, somewhat darker than on under surface.

Head with erowded and fairly large punctures, becoming longitudinally confluent both in front of and behind clypeal suture. Clypeus feebly diminishing in width to apex, which is gently incurved to middle, and with angles moderately rounded. Antennae nine jointed. Prothorax with front angles moderately produced, hind ones rounded off, sides subacutely produced, median line absent; punctures rather inconspicuous. Elytra very short. Hind parts with rather dense asperate punctures, almost concealed by pubescence on the propygidium. Front tibiae unidentate, the apical process long and acute; hind tarsi with first

joint conspicuously longer than second. Length, 6:5-7:5 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15464. Belongs to Blackburn's Group 12, and would be there associated with L. sericeipennis, which was described as having the front tibiae "rather strongly bidentate"; in general appearance it is strikingly close to L. discipennis, and L. canescens (of Group 11), but the elytra are quite glabrous: in appearance it is very close to L. occidentalis, which has the even curve of the front tibiae interrupted by a small tooth, and the two basal joints of the hind tibiae almost equal in length; L. cinctipennis is similarly coloured, but has prothorax and hind parts very differently clothed; L. bimaculatus has the hind parts very differently clothed, and much less of elytra pale. Of four specimens taken on the island one has the elvtra opaque from every point of view, one has them opaque from most directions, but from almost directly above they have a beautiful golden gloss; on the third they are shining (even the black parts) from almost every point of view; the fourth specimen was badly damaged by grease; when they appear to be shining their punetures are also sharply defined, and are seen to be in geminate rows with numerous scattered ones on the interstices; but when the elytra appear to be opaque, their punctures are scarcely visible. The prothoracic punetures on two specimens are scarcely visible, although they are not particularly small, but on the other two they are rather sharply defined. The clypeus is but feebly concave, as the sides are only slightly elevated, and the apex not at all.

Pseudoryctes bidentifrons, n. sp.

3. Deep black and shining, most of under surface, parts of legs, and of antennae reddish. Under surface and legs with long stramineous, or reddish

hair, in places changing to bristles.

Head small and impunctate between eyes; clypeus with suture feebly elevated, sides and front acutely margined; with rather coarse punctures; canthi with rather coarse punctures. Antennae ten jointed, three joints of club as long as the rest combined. Prothorax strongly transverse; with a wide and deep cavity occupying most of the surface, the cavity glabrous and with numerous transverse scratches; in front with two small triangular teeth, each side of cavity in middle with a strong elevation, feebly bifid at its summit, just below each of these a small projection. Scutellum with a few punctures. Elytra slightly wider than long, slightly narrower than prothorax; feebly wrinkled and with a few inconspicuous punctures; with a distinct stria on each side of suture, and a feeble marginal one. Length, 15-18 mm.

Hab.—Northern Territory: Borroloola, three males (G. F. Hill). Type in

National Museum.

A jet-black species, readily distinguished from all previously recorded from Australia by the two small and rather widely separated projections in front of the prothorax, these not being in any way conjoined, but separated by an incurved space almost equal to the distance between the eyes. The elytra have a close-set posterior fringe; and the pygidium is crowned with a longer and looser one.

#### OEDEMERIDAE.

Pseudolycus laticornis, n. sp.

2. Black, in parts with a slight coppery gloss; elytra brick-red, the suture and sides to near apex narrowly black; checks in front of eyes, most of ninth joint of antennae, and base of tenth, dingy whitish. Densely clothed with short pubescence, similar in colour to the derm on which it rests, except that there is a small oblique golden spot on each side of prothorax.

Head obliquely flattened in front; with small, dense, partially concealed punctures. Antennae moderately long, third to seventh joints wide and flat, third triangular, fourth and lifth with sides more rounded towards base, sixth narrower, seventh still narrower, but at least one-third as wide as long, the others much narrower, eleventh semidouble. Prothorax about as long as the greatest width (across the apical third), with three shallow depressions: one at base and one on each side at apical third; punctures as on head. Elytra much wider than prothorax, parallel-sided to near apex, each with four discal costae, of which the second and fourth terminate slightly nearer the apex than the others; with small crowded punctures. Length, 8-10 mm.

Hab.—New South Wales: Dorrigo (W. Heron). Queensland: Glen Lamington (Dr. E. Mjoberg). Type, I. 12238.

In general appearance like the variety rufipennis of P. haemorrhoidalis, but shorter and more compact, prothorax with two small, oblique, marginal spots of golden pubescence, part of the cheeks and of the eighth joint of antennae whitish; in P. bivitticollis the prothoracic markings are almost parallel, and extend from base to apex; P. haemopterus is a narrower species, with deeper prothoracic impressions, etc. The black part of the suture is very narrow on the basal half and at its widest part does not quite extend to the subsutural interstice; the black margin is widest at its base, and is narrowed posteriorly, they all terminate slightly before the tips of the costac.

# Pseudolycus megalops, n. sp.

3. Black, in parts with a slight coppery gloss, elytra flavous, the suture and sides narrowly black, seventh and eighth joints of antennae partly whitish. Densely clothed with short ashen or white pubescence.

Head obliquely flattened, and gently concave between eyes, these unusually large and prominent; with small dense punctures. Antennae rather long and thin, third to sixth joints somewhat flattened, eleventh semidouble. Prothorax slightly longer than the greatest width (near apex), with three large and fairly deep impressions: one basal, one on each side near apex; punctures as on prothorax. Elytra much wider than prothorax, parallel-sided to near apex, each with four discal costae, of which the third is scarcely traceable beyond the middle; with small crowded punctures. Length, 7-8 mm.

Hab.—New South Wales: Dorrigo (W. Heron). Type, 1. 12237.

The antennae are thinner than in *P. hilaris* and *P. carteri*, and the eyes are larger and more prominent, the antennae are about the thickness of those of the male of *P. haemopterus*, but the eyes are much larger, the width across them

being equal to that of the base of the prothorax. On the type the base of each tibia and of the basal joint of antennae is very obscurely diluted with red.

#### Pseudolycus basiflavus, n. sp.

Black; inter-antennary space and base of head, prothorax, scutellum, basal sixth of elytra, prosternum, part of mesosternum, and parts of legs flavous. Densely clothed with short pubescence, dark on the dark parts, white on the pale.

Head gently convex; with small dense punctures; muzzle rather long, the jaws notched at apex. Antennae rather long, second to ninth joints cylindrical (the others missing). Prothorax about as long as the greatest width (across apical third), with a shallow depression at base, and another on each side near apex; punctures inconspicuous. Elytra much wider than prothorax, shoulders strongly rounded, sides parallel to near apex; each with two discal costae: punctures dense and small. Length, 6 mm.

Hab.—Queensland: Cairns district (F. P. Dodd). Typc (unique), 1. 12239. The markings are very different from those of any other known Australian species of the family. This species would possibly have been regarded by Blackburn as belonging to a new section of Copidita, but he appeared to be unaware of the great variation in the antennae of Pseudolycus, to which genus I think the present species should be referred. The front and middle coxae and base of front femora are brightly flavous, the hind coxae and parts of middle and of hind femora obscurely flavous. The type is probably a female.

### Pseudolycus fasciatus, n. sp.

Black and flavous. Rather sparsely clothed with short pubescence, except on elvtra, where it is dense.

Head moderately convex, a small fovea each side near eye; with small and rather dense punctures; jaws notched at apex. Antennae rather long and thin, third to tenth joints cylindrical, eleventh semidouble and slightly shorter than tenth. Protherax slightly longer than the greatest width (near apex), with a shallow transverse impression near base, and a deeper one on each side near middle; punctures as on head. Elytra much wider than prothorax, parallel-sided to near apex, each with two feeble discal costae, and traces of still more feeble ones; with small and very dense punctures. Legs long and thin. Length, 5.5 mm.

Hab.—New South Wales: Acacia Creek (II. J. Carter). Type (unique). I. 12240.

Strikingly different from all other known species of the genus, and at first glance much like some species of *Telephorus* and *Sclenwus*, of the Malacodermidae; it would probably have been referred to a section of *Copidita* by Blackburn. The flavous parts are the parts of the head about the base of each antenna, prothorax (except for a wide, black, submedian fascia), elytra (except for narrow spaces at base and apex, and a fascia near apex—the space between the apex and subapical fascia more brightly flavous than elsewhere, the part between the subapical and basal black markings clothed with rusty-red pubescence), parts of prosternum and of mesosternum, four basal segments of abdomen, coxae, half of middle femora and less of the others, and base of tibiae.

#### CURCULIONIDAE.

#### Leptops mirabilis, n. sp.

Black. Densely clothed with light-brown substramineous scales, and, in addition, with numerous setac.

Head somewhat flattened between eyes; inter-ocular fovea very narrow. Rostrum stout, with aberrant sculpture. Prothorax slightly longer than wide.

sides feebly rounded; with numerous obtuse tubercles, with a shallow mediofrontal impression and a feeble median node. Elytra with shoulders oblique, sides feebly increasing in width to about middle; with large but (except on sides) mostly shallow and ill-defined punctures; suture, third, fifth, and seventh interstices obtusely tuberculate. Legs long; front tibiac conspicuously flattened, grooved on each side and lightly denticulate. Length, 19 mm.

Hab - Lord Howe Island.

One of the most remarkable species of the genus; in the 1906 table it would be associated with those referred to G, from all of which it is very different; it is one of the very few species whose prothorax, by measurement, is seen to be actually a trifle longer than wide. On the elytra most of the setae are confined to the tubercles, which they cause to appear almost like small fascicles, and they are comparatively short there, as also on the prothorax and head; but on the muzzle, legs (femora as well as tibiae), and abdomen they are rather dense and decidedly long (almost hair-like). The rostrum is very peculiar, the median carina is entirely absent, the intermediate ones are short and much closer together than usual; the sublateral sulcus on each side becomes a wide excavation (at its widest fully half the distance between the eyes), bounded behind (but not closed by same), by an obtuse elevation (but this could not be regarded as a tubercle), and open in front, where the intermediate carina vanishes; the scrobes are deep in front and at the middle, and are then directed towards the lower half of the eyes, but vanish before reaching them. The scape is moderately long and somewhat thickened at the apex, all the other joints (except the basal one of the funicle) are missing from the type. The elytral tubercles are all small, but a few about summit of apical slope are fairly conspicuous; they mostly have the appearance as of being flattened backwards. A specimen recently taken by Mr. R. Baxter is in perfect condition, and is so densely clothed that the derm is almost everywhere concealed; its prothorax is slightly wider than long, and antennae somewhat longer than usual. Type, K. 15050, in Australian Museum.

# Howeocis, n. g.

Head moderately large, almost coneealed from above. Eyes small, lateral, coarsely faceted. Rostrum rather short; scrobes narrow and deep, front portion visible from above, posteriorly obliquely directed towards and reaching front margin of eyes. Antennac thin; scape lightly curved; basal joint of funicle elongate, the others short; club briefly ovate. Prothorax lightly transverse, ocular lobes almost absent. Scutellum absent. Elytra subovate, scriate-punctate. Prosternum feebly incurved to middle at apex. Metasternum short. Abdomen with two basal segments large, intercoxal process very wide, third and fourth very short, the fifth small. Legs moderately long; front coxae touching, middle pair lightly separated, hind pair about as far apart as the femora are long; femora moderately stout; tibiae long and rather thin, dilated at apex; tarsi thin, third joint moderately wide and deeply bilobed, claw joint thin, as long as the rest combined, with free claws.

The only known species is a small, conspicuously sctose weevil, with some parts densely clothed, but the abdomen and sides of elytra highly polished. The narrow deep scrobes, clearly cutting into the rostrum to the front of the eyes, are practically the only features distinguishing it from *Mandalotus* (near which it should be placed in catalogues), although on account of several of its specific features it would appear out of place in that genus. Three specimens were obtained from fallen leaves; I have not broken one of them to be certain, but believe the body to be apterous.

#### Howeocis setosus, n. sp.

Black, appendages and apical segment of abdomen reddish. Densely clothed with muddy-brown scales, but sides of elytra for the space of about three interstices, and abdomen, highly polished and with a feeble bluish gloss; with numerous long, stiff, upright setae on prothorax and elytra, and a few between eyes.

Head with sculpture normally concealed. Rostrum with apical portion polished but scarcely in the form of a triangular plate. Prothorax with rather strongly rounded sides; with dense small punctures, and some of larger size, but all more or less concealed before abrasion. Elytra with sides rather strongly rounded, widest at about basal third; with regular rows of large, rounded punctures, partially concealed by clothing except on sides, where they are very conspicuous, although somewhat smaller. First segment of abdomen about as long as second and third combined, fifth as long as third and fourth combined. Length, 2·5-3 mm.

Hab.—Lord Howe Island (A. M. Lea and wife). Type, I. 5801.

A small dingy weevil, but of exceptional interest.

### LAEMOSACCUS BREVIPENNIS, Pasc.

The type of this species was a female. The male differs in having the rostrum slightly shorter, wider, opaque, and rough throughout, with subgranular elevations. The median fascia of the elytra is composed of short dark velvety pile, margined with ochreous, and is usually very distinct, but is occasionally broken up into irregular spots. The eyes are unusually widely separated, their distance apart being about equal to the diameter of an eye. The species occurs from the Manning River, in New South Wales, to Cairns, in Queensland.

# Laemosaccus rivularis, Lea.

This species is not a variety of *L. bilobus*, as I thought possible when describing it; but its type is an immature female. Six specimens from Queensland (National Park, and Bunya and Tambourine Mountains) are evidently mature, and in perfect condition. The general colour is piceous-brown or black, the elytra obscurely paler, the prothoracie spots are as described on the type; on each elytron there are numerous small spots; one on the third interstice at base, several forming an oblique row commencing at the scutellum, the row becoming irregular till it joins an irregular postmedian fascia of spots, a spot common to the second and third interstices at apex, and one on the eighth about middle. The male differs from the female in having the rostrum shorter, stouter, opaque, with coarser punctures, and a well-defined median groove to near the apex.

# Laemosaccus argenteus, Lea.

The type of this species is a female. The male differs in having the rostrum much shorter, stonter, opaque, and with decidedly coarser punctures (almost as coarse as those on pronotum). The length (excluding rostrum) varies from 2.5 mm to 4.5 mm. Queensland specimens now before me are from Kuranda. Brisbane, and Bribie Island. The specimen from the island has reddish legs and is probably immature.

#### Laemosaccus haustellatus, n. sp.

6. Black or blackish, antennae and legs more or less reddish. Upper

surface with yellowish pubescence, becoming whitish on under surface.

Head long and with crowded punctures. Eyes large and almost touching. Rostrum long (about the length of front tibiae), slightly curved, fairly wide in front, narrowed between insertion of antennae (almost in exact middle) and

base; with a small inter-antennal fovea, and with rather crowded punctures. Prothorax with the median length slightly more than the greatest width, apex about two-thirds the width of base; with crowded punctures, slightly larger than on head. Elytra with narrow striae, containing deep-set punctures; interstices granulate and densely punctate. Femora dentate. Length (excluding rostrum), 5-6.5 mm.

2. Differs in having the rostrum much longer and thinner, with smaller and sparser punctures, and antennae inserted distinctly nearer the base, the elytra

are slightly wider, and legs and club of antennae somewhat shorter.

Hab.—Northern Territory (J. P. Tepper), Darwin (C. Davies), Mary River (G. F. IIill). North-Western Australia: Wyndham (J. Clark). Type,

I 16014.

Allied to L. longicets, and with the eyes almost touching as in that species. but rougher, rostrum of female slightly longer, and femoral dentition much less distinct; L. dapsilis and L. ocularis have eyes less close together, and the rostrum of the female wider, and with coarser punctures. As on many other species, the prothoracic clothing forms a more or less distinct cross. Of the eight specimens before me five are coloured as described, except that on two of them the femora are deeply infuscated; on two others the elytra are obscurely reddish at the tips. and along part of the suture; the other is entirely of a dingy red. The vellowish pubescence forms a narrow line between the eyes, beyond which it is continued (but wider) to the base of the head; on the pronotum it forms a median line. but is dilated to and interrupted at middle, with a small spot on each side of the interruption (on some specimens, owing to partial abrasion, there appear to be four submedian spots), the front and hind angles appear to be spotted from above, but the spots are joined to the lateral clothing. On the elytra the pubescence is dense on the basal half of the sutural region, and four more or less feeble fasciae may be traced: one basal (usually feeble), another before the middle (connected with the dense sutural patch), the third postmedian (on some specimens appearing as a double transverse row of spots), and the other apical (this usually feeble). The front femora have a small but acute tooth, becoming smaller on the middle pair, and almost vanishing from the hind ones.

# Laemosaccus bidentatus, 11. sp.

8. Black, antennac and legs more or less reddish. With whitish and pale

vellowish pubescence.

Head long. Eyes large and almost touching. Rostrum rather long (slightly shorter than front tibiae), slightly curved, slightly di'ated in front of antennae (these inserted about one-third from apex), and with rather coarse crowded punctures. Prothorax slightly longer than wide, with the remnant of a median line in front. Front legs long, their femora conspicuously bidentate. Length, 5 mm.

Hab.—Queensland: Endcavour River (C. French),

The eyes are as close together as on the preceding species and on L. longiceps, but from those species, as also from L. dapsilis, it is readily distinguished by the bidentate front femora; the largest tooth is subbasal, acute, and about as long as the tibiae are wide, the other tooth is close to it, about half its size and less acute. The type is possibly somewhat abraded, as there is no clothing on the upper surface of its head and on the pronotum (except on the angles and middle of the base of the latter); on the elytra there is a fairly large X-shaped patch on the basal half of the sutural region, an interrupted fascia at the apex, and small spots e'sewhere. The punctures and elytral granules are normal. A specimen, from Cairns (J. A. Anderson), is in the Queensland

Museum; it agrees closely with the type, except that it has somewhat darker antennae.

Laemosaccus subcylindricus, n. sp.

3. Dull red; head, extreme base of rostrum, scutchum, and most of under surface black. Moderately clothed with white or stramineous pubescence, forming spots on elytra, and becoming dense on sides of prothorax, and on under surface.

Eyes large and fairly close together. Rostrum moderately long (slightly shorter than front tibiae), feebly dilated to apex, very feebly curved; with a feeble median line; punctures fairly coarse and erowded, but mostly concealed behind insertion of antennae (about one-third from apex). Prothorax with median length almost equal to greatest width, apex about one-third less than base and feebly bisinuate, with a vague median line, containing a feeble and abbreviated earina; densely and minutely granulate-punctate. Elytra rather long and subcylindrical, slightly wider than prothorax; with deep-set punctures in narrow striae, interstices densely punctate or granulate-punctate. Front femora strongly, middic moderately, hind ones feebly dentate. Length, 4·5-5 mm.

Q. Differs in having the rostrum slightly longer and thinner, more cylindrical, with sparser clothing and smaller punctures; antennae inserted nearer

the middle of rostrum, and front legs slightly smaller.

Hab.—Victoria (National Museum), Kewell (- Hill). Type, I. 16032.

In general appearance close to L. cossonoides, but eyes closer together and clothing of upper surface more concentrated into spots, these forming a loose fascia just beyond the middle of elytra. L. ocularis is larger, has rostrum longer and more curved, fascia of elytral spots nearer the apex, the basal clothing different, and femora edentate. On the upper surface the pubescence is sparsely but evenly distributed, except that it is fairly dense behind the scutellum, forms a transverse series of spots beyond the middle (they appear to be always present on the second and third interstices and usually on the fifth and sixth, but the latter are easily abraded), and a feeble fascia at apex; on the pronotum it forms a rather wide median line, which is dilated, and sometimes maculate, about the middle; on the head it is dense between the eyes and on the sides; on the male it is continued to the middle of the rostrum, but not so far on the female. The distance between the eyes, at their nearest approach to each other, is about half the width of the rostrum in the female, somewhat less in the male. The elytral granules are minute and rounded, without the jugged appearance as on most species of the genus.

Laemosaccus marmoratus, n. sp.

Dull red and blackish-brown. With more or less yellowish or ochreous

pubescence.

Eyes large and rather widely separated. Rostrum slightly longer than front tibiac, rather thin, straight and cylindrical; with crowded and well-defined punctures; with a feeble median carina behind antennae (these inserted about two-thirds from base). Prothorax slightly wider than long, with a feeble median carina on basal half, on each side of which at base is a feeble elliptic depression or fovea. Elytra short, depressed in middle towards base; with narrow punctures, in deep striae. Front femora stout and acutely dentate, the others smaller. Length, 4.5 mm.

Hab,—New South Wales. Unique.

The upper surface has a mottled appearance, somewhat as on many specimens of L, subsignatus, but the pubescence forms a conspicuous V on the elytra. The rostrum is long, straight, and clothed only at the extreme base, but as it is subopaque and rather coarsely punctured, the type is possibly a male. The

head and rostrum are blackish, as is most of the pronotum, on the elytra there are five or seven dark patches, most of the abdomen is black, the rest of the under surface and the legs are reddish. On the pronotum the pubescence is dense on the sides, and forms a median line with a cross-piece at the basal third; on the elytra the sides of the V commence on the shoulders and are conjoined on the suture near the apex. The distance between the eyes, at their nearest approach, is about half the width of the rostrum. The punctures on the head and prothorax are crowded and small, the elytral interstices are densely granulate-punctate, the granules round and inconspicuous, but there are a few coarse ones about the apical third. The sutural interstice on each elytron is terminated at the scutellum (which is twice as wide as long), the base of the second is slightly curved around it.

### Laemosaccus tenuirostris, n. sp.

9. Black, antennac, front of prothorax, most of elytra, tarsi, and parts of tibiae reddish. Irregularly clothed with somewhat yellowish pubescence.

Eyes large and well separated. Rostrum long, thin, straight, and cylindrical; with dense and moderately large punctures towards base, becoming small and sparser towards apex. Antennae inserted about two-fifths from base of rostrum. Prothorax slightly longer than wide, rather strongly constricted near apex; with a feeble median line in front, altering to a carina towards base; with two well-defined foveae at base, and two feeble impressions in middle. Elytra strongly depressed about suture near base. Femora acutely dentate. Length, 5 mm.

Hab.—Queensland: Mount Tambourine (H. J. Carter). Type, I. 16015.

The elytral markings simulate those of pale specimens of L. querulus, L. subsignatus, etc., but the rostrum is much longer than in those species, and is decidedly longer than in any species in which it is straight; it is distinctly longer than the front tibiae and is quite as long as in L. longiceps, in which it is curved. The type differs from that of the preceding species in having a much longer rostrum (it is, however, certain to be sexually variable), the prothoracic fovcae more conspicuous, elytra without a pubescent V, the dark markings differently disposed, most of the legs, and all of the under surface black. The punctures and the elytral granules are much the same. From above the elytra appear to have five black spots: a round mediosutural one, and two on each side, of which the first is triangular and before the middle, the other beyond the middle and transverse, but the lateral spots are joined on the margins. The clothing is probably partly abraded, the pubescence is rather dense on the sides of the prothorax and forms a cross in the middle (the cross-piece nearer base than apex; on the elytra it is pale on the red parts, and blackish on the dark parts. The distance between the eyes is slightly more than half the width of the rostrum. At a glance the front femora appear to be bidentate, but this is due to the unusual prominence of the trochanters.

# Laemosaccus cylindricus, n. sp.

Black, antennae, tarsi, tibiae, and parts of femora reddish. Irregularly

clothed with golden pubescence, becoming whitish on under surface,

Eyes large and close together. Rostrum long (slightly longer than front tibiae), thin, cylindrical, shining, and feebly curved; with dense and fairly coarse punctures about base, becoming smaller and sparser in front. Antennae inserted about two-fifths from base of rostrum. Prothorax slightly longer than wide, sides feebly rounded, slightly constricted near apex, which is not much narrower than base, median line feeble; with small crowded punctures. Elytra long, cylindrical, scarcely wider than widest part of prothorax; striate-punctate, interstices with small crowded punctures, the fifth with a few granules. Femora feebly dentate. Length, 2·5-3 mm.

Hab.-Victoria: Dividing Range (Rev. T. Blackburn). Type, I. 16016.

A narrow cylindrical species, with outlines approaching those of *Magdalis*. In general appearance it is close to *L. festivus*, but is longer and thinner, the rostrum is decidedly longer and thinner, and is not straight; as it is alike on six specimens, taken by Mr. Blackburn, they are probably all females. The golden pubescence is dense on the sides of the prothorax, and irregular about the middle, on the clytra it is fairly dense in the sutural region, and about apex, just beyond the middle it has a subfasciate appearance, owing to fine lines on most of the interstices. The distance between the eyes is less than one-third the width of the rostrum.

Laemosaccus biseriatus, n. sp.

Black, antennae and tarsi reddish. Rather sparsely clothed with short, rusty, or golden-red pubescence, the clytra with two transverse series of golden spots.

Eyes large, round, and moderately separated. Rostrum slightly longer than front tibiae, and slightly shorter than prothorax, subcylindrical, moderately curved; with rather coarse crowded punctures about base, smaller and sparser, but sharply defined elsewhere. Antennae inserted in middle of rostrum. Prothorax moderately transverse, sides gently rounded, and constricted near apex, which is feebly trisinuate; a feeble remnant of a median carina in middle; punctures crowded and small. Scutellum small and round. Elytra rather long and cylindrical, scarcely wider than widest part of prothorax; striate-punctate, interstices densely punctate and gently ridged along middle; without distinct granules. Front femora acutely dentate, the others less distinctly so. Length, 4·5 mm.

Hab.-Victoria: Dividing Range (Rcv. T. Blackburn). Type, I. 16017.

A cylindrical species, with outlines approaching those of Magdalis; no closely allied one has previously been named from Australia. The type is thinly clothed with short depressed pubescence, usually inconspicuous, but from some directions it appears of a beautiful golden-red; the golden spots on the elytra are in two series, one at the basal third on the second to fourth interstices, the other at the apical third on the second to sixth interstices, but on the second series the spots on the third and fourth interstices are posterior to the others. The distance between the eyes is about one-third the width of the base of the rostrum. The type is probably a female, but was described, as its clothing is evidently in perfect condition; two somewhat smaller specimens (3·5-4 mm.) are probably partly abraded males of the species, their pubescence is as on the type, but is sparser, and on the elytra the series at the apical third is very feeble and no trace remains of the series at the basal third; they have the rostrum somewhat shorter (although longer than the front tibiae) and wider, but with similar punctures, and with the eyes slightly closer together.

### Laemosaccus imitator, n. sp.

Black, elytra almost black, antennae (club darker) and legs more or less

reddish. Sparsely clothed with depressed, inconspicuous pubescence.

Eyes large and round but widely separated. Rostrum moderately wide, slightly longer than front tibiae, distinctly curved and shining; with rather dense and coarse punctures at base, becoming smaller in front; with a shining impunctate line from base to antennae (which are inserted just perceptibly beyond the middle), where it terminates at a feeble longitudinal impression. Prothorax with outlines, punctures, and remnant of a carina as in the preceding species. Scutellum small and round. Elytra subcylindrical, scarcely wider than prothorax. Femora each with a small acute tooth. Length, 3 mm.

Hab.—South Australia: Port Lincoln (Rev. T. Blackburn). Type, I. 16024. A Magdalis-like species, with curved rostrum, and widely separated eyes, the

distance between them almost equal to the width of an eye. The outlines are somewhat as in the preceding species, from which it differs in having shorter elytra, with sparser clothing, wider rostrum and more distant eyes; the seriate punctures on the elytra are much the same, but the interstices are less convex, and have sparser punctures. L. magdaloides is a smaller species, with eyes much closer together. The type, which is probably a male, has the general appearance of Magdalis stenotarsus, but the club is much shorter, and the third tarsal joint is wider.

### Laemosaccus quadriseriatus, n. sp.

Black, antennae pale reddish, the club and tarsi darker. Upper surface with

ochreous spots and markings.

Eyes large, round, and well separated. Rostrum moderately long (slightly longer than the front tibiae), feebly curved, not very wide, sides slightly incurved to middle; with crowded and moderately large punctures at base, becoming smaller but still dense in front. Antennae inserted slightly nearer base than apex of rostrum. Prothorax about as long as wide, sides rather strongly rounded, median earina feeble but traceable on basal half. Elytra slightly wider than widest part of prothorax. Front femora acutely, the others more feebly dentate. Length, 4·5 mm.

Hab.—Tasmania: Cradle Mountain (H. J. Carter and A. M. Lea). Type

(unique), I. 16018.

The prothoracic outlines and punctures, and the elytral striae, punctures and granules, are as on most species of the genus; but the markings should be distinctive, they are: a median line on the head from base to base of rostrum, a fairly large spot in middle of apex of pronotum, a longer one at base, and two small spots in middle (remnants of a cross), and some feeble spots at sides; on the elytra the spots form four distinct transverse series, one at the base of rather long spots on the third and fifth interstices, with one on the margin (invisible from above); the second before the middle, on the first and second interstices; the third beyond the middle, on the second to fourth and sixth to eighth interstices; and one on the third interstice at apex. The distance between the eyes, at their nearest, is about half the width of the base of rostrum.

### Laemosaccus niveonotatus, n. sp.

8. Dark brown, antennae paler, parts of under surface black or blackish.

Clothed with white and ochrous pubescence.

Eyes large, round, and well separated. Rostrum not very long (slightly shorter than front tibiae), feebly curved and rather stout; with dense and coarse punctures, somewhat smaller and sharply defined in front, but still dense; with a short median line. Antennae inserted about one-third from apex, in scrobes, parts of which are distinct from above. Prothorax slightly narrower than the median length, with a feeble median line, becoming feebly carinate at base, on each side of which is a feeble depression or fovea. Elytra depressed behind scutellum (which is within a eonspicuous depression); the interstices with numerous small, flat, shining granules, but with many larger angular ones on apical third. Femora, especially the front ones, strongly and acutely dentate. Length, 5-6 mm.

2. Differs in having the rostrum smoother, subcylindrical, clothed only at extreme base, with smaller and more sharply defined punctures, nowhere confluent, and clothed only at extreme base; the front legs are also shorter.

Hab.—Queensland: Dalby (Mrs. F. H. Hobler).

Allied to L. tropicus and L. rivularis, from the former distinguished by the more numerous spots on elytra, and absence of a large patch of pubescence about

the scutellum: from the latter by the absence of an oblique row of spots on each elytron commencing at the scutellum (the two forming sides of a wide angle). The white pubescence is dense on the under surface, including sides of prothorax, but there are five ochreous spots on each side; two on the prosternum, two on the metasternum, and one at base of abdomen, but they are not sharply limited. On the elytra it is rather sparse about the base, and is condensed into numerous small spots in three posteriorly curved series, of these the first is at the basal third, on the first to fourth interstices (on two specimens present only on the second and third), the second is beyond the middle, irregularly extending from the suture to the margins (but on one specimen represented only by spots on the third and eighth interstices), the third is close to apex (on one specimen it is represented by three spots on each side, on another by one spot on each side, but it is absent from a third specimen); there are also a few irregular spots between the two submedian series on two specimens. The ochreous pubescence is dense on the head between the eyes, and extends well on to the rostrum of the male; on the pronotum it forms a rather feeble cross, the long piece interrupted at the basal third, where two spots represent the cross-piece. The prothoracic punctures. and the elytral punctures and striae, are much as on many other species, but the elytral granules are more numerous and conspicuous.

#### Laemosaccus triseriatus, n. sp.

Black, front of prothorax, elytra, legs (front ones partly black), and antennae more or less reddish. Clothed with pale ochreous or somewhat golden pubescence, dense on front of head and between the eyes, on the sides of prothorax, on scutellum, and on under surface, forming a cross on pronotum, and three trans-

verse series of spots on elvtra.

Eyes large and subelliptic, separated about half of the width of base of rostrum. Rostrum slightly longer than front tibiae, somewhat curved, subcylindrical; with fairly coarse but partially concealed punctures about base, becoming smaller but sharply defined in front. Antennae inserted slightly nearer apex than base of rostrum. Prothorax with a feeble median line in front, and a feeble median carina at base, on each side of the latter a shallow depression. Elytra with dense and minute granules, but becoming numerous and conspicuous beyond the second series of spots, a few on the third and fifth interstices elsewhere. Femora strongly (the front pair very strongly) and acutely dentate. Length, 5·25 mm.

Hab.—Northern Queensland (Blackburn collection). Type (unique), I. 16019. Allied to L. rivularis, tropicus, bilobus, and the preceding species, from all of which it is at once distinguished by the rostrum. On those species on the male it is wider, rougher, and grooved; their females have it shining, glabrous, and with small punctures. The sex of the type is doubtful, but it is probably male; its rostrum is long, slightly curved, subopaque but not rough, clothed from base to insertion of antennae, and its punctures are fairly coarse. The arms of the cross on the pronotum are represented by a spot on each side of the middle at the basal third; on the eightra the first series of spots is just before the basal third, on the second to fourth interstices, the second is somewhat sinuous, beyond the middle on the second to ninth interstices, and the third is near the apex.

### Laemosaccus microps, n. sp.

Reddish-castaneous, prothorax and clytra with dark markings. Unevenly clothed with pale ochreous pubescence.

Eyes round, comparatively small, and very widely separated. Rostrum short, wide at the base and rather wide at apex, straight, shallowly grooved along

middle and with dense punetures, sharply defined in front, but more crowded and partially eoncealed about base. Antennae inserted slightly nearer apex than base of rostrum. Prothorax about as wide as the median length, median line thin and traceable throughout; punctures normal. Elytra striate-punctate, with numerous minute granules, and some larger rough ones beyond the middle, especially on the fifth interstice. Front femora strongly but somewhat obtusely dentate, the others each with a smaller but acute tooth. Length, 4 mm.

Hab.—Queensland: Cairns district (A. M. Lea). Type (unique), I. 16020. The eyes are unusally wide apart, the distance between them being about equal to twice the diameter of an eye. L. brevipennis, which has somewhat similar eyes, is a larger species, with a considerably longer rostrum, prothorax less convex (especially in front), elytra more concave about the suture, and very different clothing. The dark markings on the pronotum are due to rather slight infuscations, which form a distinct circle on each side of the middle at the basal third, the circles connected with other thin infuscations; on the elytra, in addition to some feeble spots, there is a distinct oblique line from each shoulder to near the middle of the fifth interstice. There are three seminude spots on the head. As the rostrum is feebly grooved the type is probably a male.

#### Laemosaccus latirostris, n. sp.

3. Black and reddish. Clothed with pubescenee varying from whitish to oehreous, and on the elytra forming three transverse series of feebly defined,

elongated spots.

Eyes fairly large but widely separated. Rostrum short, wide, and straight, slightly dilated to apex; with eoarse punctures. Antennae inserted almost in middle of rostrum. Prothorax distinctly transverse, strongly convex, median earina traceable almost throughout, a distinct fovea on each side of its base; densely granulate-punctate. Elytra short, with a few small granules on fifth interstice, elsewhere inconspicuous. Femora, even the front ones, rather feebly dentate. Length, 2 mm.

Hab.—Queensland: Cairns district (A. M. Lea). Type, I. 16021.

A very small species, with unusually wide rostrum, this, except for the jaws, being quite as wide as long. The elytral markings are suggestive of unusually small and pale specimens of L. subsignatus and L. querulus, but the smallest specimens of those species before me are considerably larger than the largest one of the present; the eyes are also more widely separated (the distance between them is slightly more than the diameter of an eye). The four males taken vary in intensity of the colours. The prothorax is black or blackish, with the apex reddish; on the elytra there is a curved blackish mark from each shoulder to about the middle of the fifth interstice (sometimes represented by spots), and an irregular subapical fascia (on one specimen appearing as five isolated spots); the under surface is mostly blackish, the front femora (or all of them) and parts of the head are infuscated. The inner margins of the eyes are accentuated by strips of pale pubescence.

### Laemosaccus scutellaris, n. sp.

Black; prothorax, elytra, and antennae, except club, reddish. Sparsely

pubescent.

Eyes large and rather close together. Rostrum about the length of front tibiae, straight, cylindrical, and highly polished; with sparse and minute punctures. Antennae inserted about basal third of rostrum. Prothorax slightly longer than wide, median line traceable throughout; densely granulate-punctate. Scutel'um equilaterally triangular. Elytra moderately long and subcylindrical; narrowly striate-punctate, interstices with very fine granules and some of larger size, but

none rough and conspicuous. Front femora moderately, the others feelily dentate. Length, 4.5 mm.

Hab.—New South Wales: Jindabyne (H. J. Carter). Unique.

A red and deep-black species, with a short, straight, eylindrical rostrum, readily distinguished from all other species with red elytra by the comparatively large and conspicuously triangular scuteilum. The clytra, at the apical third, have a transverse series of thin spots of stramineous pubescence, fairly distinct on the second to fourth interstices, and traceable on others, the scutellar region is slightly pubescent; the pronotum is glabrous, except about the base and apex, which are very feebly clothed.

### Laemosaccus cylindrirostris, n. sp.

Black and reddish. A strip of pale pubescence along the inner side of each

eve, elsewhere very feebly pubescent.

Eyes large and separated almost the width of that of rostrum. Rostrum rather short, thin, straight, cylindrical, and shining; with sparse and minute punetures, becoming larger at base. Antennae inserted at base of rostrum. Prothorax slightly wider than long, strongly eonvex, sides strongly rounded, base much wider than apex; with a narrow median carina distinct from base to apex; punctures crowded and rather eoarse. Elytra rather long, parallel-sided except at base and apex; strongly striate-punctate; interstices without distinct granules. Front femora acutely dentate near base, the others feebly dentate. Length, 2:5-3 mm.

Hab.—South Australia: Quorn (Rev. T. Blackburn), Morgan (A. M. Lea).

Type, I. 16022.

A small variable species, distinct from most of the genus by the eontinuous carina of pronotum and insertion of antennae. Two specimens have elytra eoloured as on L. rufipennis, but that species has no carina on the pronotum and its rostrum is stouter; L. instabilis has similar rostrum and insertion of antennae, but is more eoarsely sculptured, and has a groove instead of a carina on the pronotum; L. rufipes, with a similar rostrum, has the pronotum bifoveate; L. variabilis and L. melanocephalus have the rostrum eurved. The black parts of the type are the head, prothorax (except for a fairly wide vitta on each side), scutellum, sides and apex of elytra (rather widely), under surface, coxae and parts of hind femora. A second specimen has a large black spot in the middle of the pronotum (touching the base but not the apex), sides of the elytra but not the tips, black, and the hind legs entirely reddish, the rest as on the type. A third specimen has the pronotum and elytra entirely pale (its hind and middle legs are missing). They are probably all females.

# Laemosaccus nigrirostris, n. sp.

Black; prothorax, elytra, antennae (the club more or less infuscated), and legs (the femora sometimes excepted) reddish. Sparsely pubeseent, but with a

transverse series of fceble pale spots, at the apical third of elytra.

Eyes large and separated about half the width of base of rostrum. Rostrum short, rather stout, eylindrical, straight and shining; with sparse and minute punetures, but larger ones at base. Antennae inserted about one-third from base of rostrum. Prothorax rather strongly eonvex, about as wide as long, sides rather strongly rounded; with a short and feeble earina in middle, ending in front in a shallow median line; densely granulate-punetate. Elytra subeylindrical, the width of prothorax at its widest; strongly striate-punetate, interstices with dense punctures, and a few granules. Front femora rather feebly dentate near base, the others still more feebly. Length, 2.75-4 mm.

Hab.—Victoria: Sca Lake (J. C. Goudic, No. 600). South Australia: Leigh Creek (Rev. T. Blackburn), Mount Lofty Ranges. Type, I. 16023.

Structurally close to *L. rufipennis* and *L. ater*, and with a similar rostrum, but the ten specimens examined have the elytra uniformly coloured, except that on two from Mount Lofty Ranges, the ninth interstice is feebly infuscated about its middle; on all the specimens I have seen of *L. rufipennis* the sides and apex of elytra, and most of the prothorax and legs are black; on *L. ater* all parts are black, except the antennae and parts of the legs and the clothing. *L. melanocephalus*, *L. ventralis*, and some specimens of *L. variabilis* are somewhat similarly coloured, but have the rostrum curved. The rostrum is stouter than in the preceding species, and black or blackish, with the antennae inserted less close to the base. There are a few distinct granules on the fifth interstice beyond the middle, and usually one or two on the fourth and sixth; but the specimens from Leigh Creek are without any, although they are not otherwise aberrant.

# Laemosaccus pubicollis, n. sp.

2. Black; apex of prothorax, clytra (except extreme base), antennae (the club somewhat infuscated) and legs reddish. In places rather densely clothed with stramineous pubescence.

Eyes large and close together in front. Rostrum rather long (slightly shorter than prothorax and distinctly longer than front tibiae), slightly eurved, and subcylindrical; with numerous sharply defined but rather small punctures, becoming larger and more crowded towards base; with a thin shining median line from near base to near apex. Antennae inserted just perceptibly nearer base than apex of rostrum. Prothorax slightly transverse; with a short, shining, median carina; with crowded partially concealed punctures. Elytra with normal punctures, striae and granules. Front femora moderately, the others very feebly dentate. Length, 4 mm.

Hab,-Victoria (C. French). Unique.

To a certain extent resembles L. carinicollis, but the rostrum is somewhat shorter and less curved, and the eyes are closer together. The pubescence is dense on the front parts of the head (it appears as a very narrow line between the eyes), on the pronotum (on which no cross is indicated, although the median carina is very conspicuous), covers a large subtriangular space at the base of the elytra, and forms a fascia of elongated spots at the apical third; the apex and sides are rather sparsely clothed. The third tarsal joint is wider, with the claw joint less produced than is usual.

# Laemosaccus rufirostris, n. sp.

Reddish; head, scutellum, and parts of under surface black. Moderately clothed with pale ochreous pubescence, becoming stramineous on head and under surface.

Eyes large, separated about one-third of the width of rostrum. Rostrum almost straight, the length of prothorax, and distinctly longer than from tibiae, sides very feebly incurved to middle; with sharply defined but not very large or crowded punctures. Antennae inserted about two-fifths from base of rostrum. Prothorax about as wide as the median length, sides feebly rounded but rather suddenly narrowed at apex; with a shining median carina, almost traceable to base, but terminated some distance from apex; densely granulate-punctate. Elytra moderately long, not much wider than prothorax; striate-punctate, interstices densely punctate, the fifth and sixth with a few large granules. Femora almost edentate. Length, 3.75 mm.

Hab.—Western Australia: Pinjarrah (A. M. Lca). Unique.

Readily distinguished from L. carinicollis, apart from colour, by the almost straight rostrum. It is close to the preceding species, from which it differs in the red rostrum, more dilated at apex (this may be sexual), eyes slightly more apart, pronotum entirely pale and with the usual cross-shaped pubescence, and third tarsal joint less dilated. The clothing is fairly dense on the front of the head, on the sides and apex of prothorax, and forms a cross on its middle; on the elytra it is fairly dense on some of the interstices about base, forms long strips on most of them in a transverse series beyond the middle, and is moderately dense on the tips.

Laemosaccus semicrudus, n. sp.

3. Head, base of rostrum, scutellum, and under surface black, elsewhere reddish. Sparsely pubescent.

Eyes large and moderately separated. Rostrum short, stout, straight, and with fairly coarse punctures about base. Antennae inserted near base of rostrum. Prothorax slightly transverse, with a continuous median line, a small fovea on each side of its base; with crowded punctures. Elytra parallel-sided except at base and apex, slightly wider than prothorax; striate-punctate; interstices with crowded punctures, and a few rather inconspicuous granules. Front femora rather feebly dentate, the others still more feebly. Length, 2 mm.

Hab.—Western Australia: Swan River (A. M. Lea).

A female is represented by a head and prothorax, with their appendages; its rostrum differs from that of the male in being thin, cylindrical, and highly polished. The species is near *L. instabilis*, but the sculpture is not quite as coarse, the basal foveae of the pronotum are smaller, and no median ones are traceable (they are sometimes feeble on that species); I have seen no specimen of *instabilis* with entirely pale elytra. The distance between the eyes is about half the width of the rostrum.

# Laemosaccus calotrichus, n. sp.

8. Black and reddish. Irregularly clothed with white and golden pubescence.

Eyes large and round, their distance apart less than half their diameter. Rostrum short and stout; with a shallow median groove, opening in front to a space where the surface is shining, and with sharply defined punctures. Antennae inserted slightly nearer apex than base of rostrum. Prothorax about as long as wide, sides evenly rounded; with a feeble median line slightly elevated at base and apex, with a conspicuous fovea on each side of the middle of base, and a small one on each side of middle (the latter usually containing a spot of golden pubescence). Elytra distinctly wider than prothorax. Femora acutely dentate-Length, 4-5·5 num.

9. Differs in having the rostrum longer, thinner, smoother, and shining, with the punctures less crowded and more sharply defined.

Hab.—Queensland: National Park (H. Hacker). Type in Queensland Museum; cotype, I. 16112, in South Australian Museum.

A beautiful species, allied to *L. tropicus, rivularis*, and *nivconotatus*, but readily distinguished by the markings. Regarding red as the ground colour the black (or deeply infuscated) parts are the back part of the head, muzzle, a triangular space on pronotum (narrow at apex and dilated—but with incurved sides—till it occupies almost the entire base), sides and apical fourth of clytra (but not the extreme tips), most of under surface, pygidium, and front femora. The white pubescence is dense on most of the under surface, forms a large basal patch on the elytra extending to the third (inclusive) interstice on each, and to

about the middle of their length, with a short extension on each corner of the patch; many spots form an interrupted fascia at the apical third, and there are some at the apex itself; on the pronotum there is a long spot between the basal fovcae. The golden pubescence is fairly dense in the front of the pronotum, and between and adjacent to the eyes. The pubescence, however, appears to be easily abraded. The punctures of the upper surface and the striae and granules of the elytra are as on many other species.

# ANTHRIBIDAE.

There are before me five beautiful species of this family, scarlet with black markings, or blackish and searlet. In Blackburn's table of the family (6) they could either be referred to *Epargemus* or to new genera. In all of them the scrobe is turned obliquely under the rostrum, but in addition to the true scrobe there is a shallow depression on each side, that is directed below the lower edge of the eye. In two of them the rostrum is very wide at the base, being there but little narrower than the head, and it is feebly dilated to just before the jaws; their colours are very different from those of the typical species of *Epargemus*, but I provisionally refer them to that genus. In the three others the rostrum is decidedly narrower at the base than the head, and is noticeably inflated in front, for these a new genus is proposed.

Epargemus crucifer, n. sp.

Black, elytra scarlet with a black cross; parts of muzzle, basal joint of antennae, front of prothorax, abdomen, and metasternum reddish, parts of legs obscurely reddish. Rather sparsely clothed with golden or whitish pubescence, nowhere forming fascicles.

Head wide, densely longitudinally strigose and with a few punctures. Eyes elliptic, the length of two basal joints of antennae. Rostrum wide and flat, at base scarcely narrower than base of head, slightly dilated in front, where it is slightly wider than long (excluding the mandibles); with crowded punctures in front, becoming strigose at base; with a thin median carina. Antennae with base concealed by edge of rostrum, first joint slightly longer than second, but apparently shorter, the others gradually decreasing in length to eighth, ninth to eleventh dilated, and forming a conspicuous club. Prothorax slightly transverse, sides gently undulated to base, which is distinctly wider than apex; with a strong carina, rather close to base in middle, sinuous and produced forwards on sides to near the middle; with crowded and rather coarse punctures, suddenly becoming much finer about apex. Elytra not much wider than prothorax, about one-fourth wider than long; with rows of large punctures in feeble striae, the interstices with minute punctures. Under surface with rather coarse, irregularly distributed punctures, and with some minute ones; basal segment of abdomen with two small tubercles close together at middle of apex, and two much smaller ones similarly placed on second; apical segment with a small elliptic fovea. Length (excluding rostrum), 4 mm.

Hab.—Qucensland: Mount Chalmers (C. French). Unique.

The upright part of the cross extends to the first stria on each elytron for part of its length, about the base it is slightly dilated, but near the apex (which it does not reach) it is suddenly dilated to cover four interstices on each elytron; the transverse part is submedian, near the suture it is about one-fourth the length of the elytra, but is dilated to each side so as to extend to about one-fourth their length.

<sup>(6)</sup> Blackb., Trans. Roy. Soc. S. Austr., 1900, p. 142.

### Epargemus bicolor, n. sp.

Blackish-brown; front of prothorax, elytra (some blackish markings excepted), metasternum, and abdomen more or less scarlet. Sparsely pubescent.

Head wide, densely longitudinally strigose. Rostrum much as in preceding species, except that the surface is rather more coarsely sculptured. Prothorax slightly transverse, wider at base than at apex, with a strong carina fairly close to base in middle, diverging to the sides, where it is abruptly terminated; with crowded and rather coarse punctures, suddenly becoming much smaller in front. Elytra not much wider than prothorax, about once and one-half as long as wide; with rows of large punctures, wider than interstices, but becoming smaller posteriorly. Under surface with large and small, irregularly distributed punctures; basal segment of abdomen slightly notched in middle of apex; apical segment with a conspicuous fovca, shallowly connected with each side. Length. 3 mm.

Hab,—Queensland: Gayndah (G. Masters).

The type has now lost the clubs of its antennae, but these when examined were similar to those of the preceding species; from that species it is distinct by its smaller size and incomplete cross. Parts of the muzzle and legs, and the two basal joints of antennae are obscurely reddish; on the elytra the suture is slightly infuscated, the infuscation near the apex having a cross-piece that extends across four interstices on each; on each side, about the middle, there is a transverse black mark, beginning at the second stria, and dilated to each side so as to cover about one-fourth of the length. From directly above or below, each end of the prothoracic carina appears as a subtriangular tubercle.

### Allochromicis, n. g.

Rostrum much longer than wide, base much narrower than head, sides strongly dilated in front. Other characters as in *Epargemus*. Type of genus, *A. coccineus*.

### Allochromicis coccineus, n. sp.

Scarlet, third to ninth joints of antennae black, two apical ones reddish-white, elytra with a faint spot near the scutellum, and four brownish ones across middle. Rather densely clothed with golden-red pubescence, variegated with small white

spots; the under surface more sparingly clothed.

Head moderately convex, densely longitudinally strigose, but surface partially concealed. Eyes large and elliptic. Rostrum (excluding jaws) almost twice as long as the basal width, between antennae fully once and one-half the width of base; with a distinct median carina from base to apex, and a thinner one on each side from base to about the middle; with crowded and partially confluent punctures. Antennae with base concealed by sides of rostrum, first joint apparently shorter than second, but really longer, third slightly longer than second and fourth, sixth to eighth transverse, ninth to eleventh forming a loose club. Prothorax about as long as the greatest width (near base), subbasal carina strong, fairly close to base in middle, more distant on sides; with a shining median line from carina to about middle; with rather coarse and crowded, but partially concealed punctures, suddenly becoming smaller in front. Elytra slightly wider than prothorax, with a shallow impression across basal third; with rows of large punctures in feeble striae, the interstices with dense and minute punctures. Under surface

with minute punctures, and with a few large ones scattered about, but becoming numerous on prosternum, and between the eyes. Length, 4-5 mm.

Hab.—Queensland: Kuranda (F. P. Dodd). Type, I. 16008.

The club is loosely articulated, and subcontinuous with the preceding joints. The submedian spots on the elytra vary in size and intensity, the inner one is almost in the exact middle of each elytron, the outer one is slightly nearer the base. The abdomen on the four specimens under examination is non-foveate.

### Allochromicis picticornis, n. sp.

Scarlet; prothorax with four, the elytra with seven black spots; second to ninth joints of antennae black, the two apical ones creamy-white. Rather densely clothed with golden or golden-red pubescence, becoming sparser and paler on under surface. Length, 5-6 mm.

Hab.—New South Wales: Richmond River (type in British Museum). Oueensland: National Park, in December (Queensland Museum, from H.

Ĥacker).

The spots are alike on the seven specimens under examination, except that they vary slightly in size and intensity; on the pronotum two round ones are placed in line with the eyes at the apical third, and two at the basal third somewhat more apart, owing to the greater width there; on the elytra one spot is on the suture at about the basal fourth, a transverse one is on the middle of each elytron, extending across two or three interstices, the others are on the sides: a large one at the basal third, the other slightly before the apical third. Structurally close to the preceding species, but larger and more robust, antennae stouter, with the ninth joint much larger, median carina of rostrum not quite extending to apex, shining median line of pronotum replaced by a feeble but longer ridge, which is not shining, and transverse depression on elytra more conspicuous. The abdomen is shallowly depressed along the middle, and the apical segment is conspicuously fovcate, but all the specimens may be males.

#### Allochromicis bifasciatus, n. sp.

Scarlet and blackish-brown, clytra bifasciate. Moderately clothed with pubescence varying from whitish to brown, and in places somewhat golden.

Head and rostrum much as in A. coccineus, except that there are fewer punctures between the carinae, and that the median one of these is somewhat shorter. Antennae comparatively thin, second joint slightly longer than third, and apparently (owing to the overlapping of the base) longer than first, the others smaller, ninth to eleventh dilated, and forming a conspicuous club. Prothorax with outlines, carina and punctures much as in coccineus. Elytra distinctly wider than prothorax; with rows of large punctures, becoming smaller posteriorly, and not in striae; interstices with small and rather dense punctures. Under surface with numerous minute ones, and some fairly large ones scattered about, and becoming dense on prosternum and apical segment of abdomen. Length, 3-3·5 mm.

Hab.—Queensland: Brisbane (H. J. Čarter); West Burleigh (Queensland Museum, from O. W. Tiegs). New South Wales: Sydney (H. W. Brown).

Type, I. 16009.

The club, although a rather loose one, is more conspicuously separated from the preceding joints than in the two other species, although owing to the flattening of its joints this is less evident from the sides than from above, where their full width is evident. The elytra are scarlet, with the suture infuscated to the basal fourth, where it joins a complete and rather narrow fascia (which is within a shallow depression), just beyond the middle there is another and somewhat wider fascia, which touches the sides at a less distance from the first than it is at the suture, beyond it the suture is also infuscated; the median part of the suture is

not at all or but feebly infuscated; the metasternum and abdomen are almost as bright as the paler parts of the elytra, the apex of prothorax, parts of the muzzle and legs, and two basal joints of antennae are somewhat reddish. On one of the specimens the pronotum is obscurely reddish, with darker zones near the apex and base; on another specimen the scarlet of the elytra has faded to a reddishorange. All three specimens have the abdomen non-foveate, and are probably females.

#### CHRYSOMELIDAE

### Rhyparida microsticta, n. sp.

Flavo-testaceous, under surface somewhat darker, parts of six or seven apical joints of antennae infuscated, elytra with four or six small black spots.

Head subopaque, a short median line connected with the faint clypeal suture; clypeus with distinct but rather sparse punctures, elsewhere without distinct punctures. Eyes prominent and widely separated. Prothorax subopaque and feebly convex; punctures very feeble; front angles acutely armed, the hind ones feebly so. Elytra about one-fourth wider than prothorax; with rows of rather large punctures, becoming smaller (but still quite distinct) posteriorly. Flanks of prosternum smooth and shining. Femora unarmed. Length, 4·5-5 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15553. Structurally very close to R. flava, but elytra with four or six spots (somewhat approaching those of R. brevilineata, but the prothorax of that species is very different); on each elytron they are placed as follows: one (about the length of the scutcllum) at the basal fourth between the sixth and seventh rows of punctures, one (twice the length of the scutellum or slightly more) between the third and fourth rows (disregarding the short subscutcllar row) at the summit of the apical slope, and one, slightly in advance of the second spot, between the seventh and eighth rows; the third spot, however, is not always present. The elytra (except for the spots) are paler than the rest of the upper surface, the knees and tarsi are slightly darker than the rest of the legs. Three specimens were obtained.

# Rhyparida rufoparva, n. sp.

Reddish-castaneous, antennae and legs paler.

Head subopaque, a deep median line between eyes; with rather dense and sharply defined punctures on clypeus, smaller but also well-defined about base. Eyes large, the distance between them scarcely one-third the diameter of each. Prothorax subopaque, more than twice as wide as long, flattened in middle, front angles unarmed; punctures larger on sides than in middle, where they are rather small. Elytra at base not much wider than prothorax; with rows of moderately large punctures, becoming smaller and less regular at apical slope. Sides of prosternum striated from base to apex. Femora unarmed. Length, 2.75-3 mm.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15556. A small dingy species, about the size of R. megalops, and with similar eyes, but there is a conspicuous impression between them, and the prothorax is wider and subopaque; in proportion the eyes are much as on the varieties of R. apicipennis, from Connexion and Woodah Islands, but the prothorax is subopaque, and the size is consistently less; the cyes are much closer together than on R. apicalis, and all its varieties. The elytra are slightly paler about apex than about base, but the shades are not sharply defined. Four specimens were obtained.

# Colaspoides cariniventris, n. sp.

 $\it \delta$ . Black, upper surface with a slight coppery gloss, under surface in parts with a coppery-green gloss, parts of legs dull red, palpi and four or five basal joints of antennae flavous, the others partly or entirely infuscated.

Head with numerous sharply defined punctures of moderate size, denser on elypeus than elsewhere; with a small inter-ocular fovea, and a small shining space near the base of each antenna. Eyes large and prominent. Antennae long and thin. Prothorax with sides strongly rounded and not dentate about middle, base distinctly wider than apex, hind angles feebly dentate; with rather large punctures, dense on sides but irregular about middle. Elytra about one-fourth wider than prothorax; with rather coarse punctures, more or less confluent behind shoulders, confined to striac between costate intervals on apical slope. Flanks of prosternum with some large punctures. Abdomen with small and moderate punctures, becoming coarse on intercoxal process; fourth segment twice the length of third, a shining flat ridge along middle, on each side of which is a depression; fifth segment short, the middle of its apex widely notched for the intrusion of pygidium; the latter with an acute median ridge. Legs rather long; front femora feebly but acutely dentate. Length, 5 mm.

Q. Differs in being shorter and more convex, antennae shorter, with fewer joints pale, prothorax more transverse, abdomen more convex, with sparser punctures, those on the intercoxal process smaller, fourth segment simple, no longer than third or fifth, the fifth gently and evenly incurved at apex, and the

legs shorter, with the basal joint of the front and middle tarsi smaller.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15557. Evidently belongs to the second section of Colaspoides, but has more the appearance of C. hoblerae of the first section, from that species it differs in being more compact, in the front femora and in the abdomen of the male. It has the general appearance of Geloptera armiventris, but the sides of the prothorax are unarmed (except for the basal angles), and the abdomen of the male is very different. Owing to the irregularity of its punctures the pronotum appears to have five feeble clevations, on the elytra there are also some feeble clevations, due to the irregularity of punctures. The abdomen of the male has two irregular rows of long dark hairs. Three specimens were obtained.

### Colaspoides excaviventris, n. sp.

&. Black, with a coppery or coppery-green gloss, legs reddish, in parts infuscated, palpi and four or five basal joints of antennae flavous, the others

partly or entirely infuscated.

Head with rather dense, sharply defined punctures of moderate size; with a faint inter-ocular depression, and a small shining space near the base of each antenna. Prothorax with sides strongly rounded and unarmed, except for the basal angles (which are very feebly produced); with dense and rather coarse punctures near sides, becoming smaller and irregular about middle. Elytra rather elongate; with strong punctures, frequently transversely confluent, but on apical slope mostly confined to striae between well-defined costae. Flanks of prosternum with large punctures. Abdomen with sparse and inconspicuous punctures, except for some rather large ones on intercoxal process; fourth segment almost flat in middle, more than twice the length of third, and widely excavated for the reception of fifth segment; the latter excavated to receive the pygidium. Legs rather long, especially the hind tibiae, front femora minutely dentate. Length, 4-4·5 mm.

Q. Differs in being slightly wider and more convex, abdomen more convex, fourth segment no longer than third or fifth, and not excavated at apex, intercoxal process with sparser and smaller punctures, and antennae and legs shorter.

with the front femora unarmed.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15561. Referred to Colaspoides for the same reasons as for the preceding species. from which it differs in being smaller and less robust, with a more distinct

greenish gloss, and in the abdomen of the male. The tooth on each front femur of the male is very small but quite distinct from some directions. Six specimens were obtained.

#### Tomyris antiqua, n. sp.

6. Of a rather dull coppery-green, becoming bright on parts of upper surface, labrum, antennae (except extreme tip), palpi, and legs (except claws) flavous. Upper surface densely clothed with short, depressed, uniform, pale pubescence.

Head wide; with small crowded punctures, with a small shining space near the base of each antenna, and with a small median earina. Eyes large and prominent. Antennae long and thin, extending beyond hind coxae. Prothorax with punctures much as on head. Elytra with slightly larger punctures than on prothorax. Fifth segment of abdomen with a small median fovea. Length, 3 mm.

§. Differs in being slightly wider, upper surface coppery, parts of under surface coppery-red, antennae shorter with five or six apical joints partly or entirely infuscated, abdomen more convex, non-foveate, and legs shorter.

Hab.—Northern Territory: Groote Eylandt (N. B. Tindale). Type, I. 15559. The prothoracic pubescence from some directions appears to be parted in the middle, but rather less distinctly than on T. mediana, from which it also differs in being smaller and more compact, and with more of the antennae of the female dark; passing that species in my table it would be associated with T. queenslandica, which is smaller, narrower in proportion, and much darker; the only other species known from the Northern Territory is T. longa, which is a much larger and otherwise very different species. The elytral punctures, although larger than the others on the upper surface, are not individually distinct, they cause the derm to appear very finely granulated. One male and nine females were obtained on the island.

### Sphaerophyma armipes, n. sp.

Flavous, a diseal spot on pronotum, most of sterna, base of abdomen, and

apical half of antennae more or less deeply infuscated.

Head minutely punctate. Eyes large and rather close together. Antennae rather long, very close together at the base, first joint about as long as the three following combined, five apical joints conspicuously flattened. Prothorax at base about four times as wide as the median length, sides strongly narrowed to apex, narrowly margined, but margins slightly dilated at apex; with dense and sharply defined punctures; with three small foveae: a medio-basal one, and a smaller one almost midway between this and each of the front angles. Elytra rather wide, sides evenly rounded; with almost regular rows of fairly large, sharply defined punctures, the interstices with numerous smaller but also sharply defined ones. Abdomen with an clongate-oval clevated space on inter-coxal process, apical segment longitudinally impressed. Hind femora very wide and subtriangular; hind tibiac conspicuously grooved along upper surface, outer edge subtriangularly notched near apex, inner edge rather strongly incurved there, apex strongly incurved, with one side acutely produced, in addition with a strong stout spur fully as long as two basal joints of tarsi; basal joint of hind tarsi slightly longer than two following joints combined. Length, 2.5 mm.

Hab.—Norfolk Island (A. M. Lea). Type, I. 7625.

Having taken but a single specimen on the island, it does not appear desirable to break it to be sure of the front coxal cavities, but placed side by side with a specimen of *Sphaerophyma simoni* it appears to have the same kind of sterna (the intercoxal process of the mesosternum appears as a narrow transverse line on both), similar elytral epipleurae, the same curious abdominal elevation, and

very similar hind legs. From *simoni* it differs in being much smaller, narrower, punctures more pronounced, pronotum with three small foveae, and hind tibiae with longer spur. The colour is probably not to be depended upon. The type appears to be a male.

Crepidodera fuscitarsis, n. sp.

Castaneo-flavous, legs flavous, the tarsi infuscated, antennae with basal half (or less) flavous, the rest infuscated.

Head rather large, base strongly convex, a narrow carina in middle separating bases of antennae; almost impunctate. Eyes rather large, moderately prominent, rather coarsely faceted. Antennae rather long and thin, first joint about as long as second and third combined, third slightly longer and thinner than second, the others subequal. Prothorax strongly convex, about once and one-half as wide as long, apex truncate, base lightly bisinuate, margins very narrow, subangulate in front, near base with a light bisinuate impression; with dense but small and inconspicuous punctures. Scutellum small and strongly transverse. Elytra subovate, widest near basal third, shoulders strongly rounded; with rows of rather large punctures in light striae, both punctures and striae becoming feeble posteriorly, interstices almost impunctate. Legs rather short; hind tibiae feebly mucronate at apex, not longitudinally grooved; claws each with a stout basal appendix. Length, 3·25-3·75 mm.

Hab.—Lord Howe Island (Λ. M. Lea and wife). Type, I. 7624.

The front coxal cavities are seen (with the prosternum separated from the mesosternum) to be conspicuously closed behind, hence, according to Blackburn's table of the subfamily, (7) the species, as it agrees with other characters of that table, could only be referred to Crepidodera, unless to a new genus (and this I am not prepared to propose). In several British species of Crepidodera (in the Museum) the transverse impression of the pronotum abruptly ends in a longitudinal one, some distance from each side; in the Queensland C. indicica, the longitudinal impressions are shorter but still well pronounced; but on the present species the longitudinal impressions are but vaguely indicated and the transverse impression is feebly continued beyond them. The base of the head is vaguely infuscated, and on one specimen there is an infuscate spot on the pronotum; some specimens have the under surface considerably darker (almost black) than the elytra; the suture is usually lightly infuscated at the summit of the apical slope, and there is usually a vague infuscation extending backwards from each shoulder to about the middle of the elytron. Five specimens were beaten from ferns from the summit of Mount Gower.

Two specimens, obtained under similar circumstances to the others, are somewhat smaller, more brightly castaneous, with the post-humeral infuscations more pronounced, and the prothoracic punctures larger and more sharply defined.

### Crepidodera instabilis, n. sp.

Castaneous, clytra maculate or not; under surface black or blackish, antennae flavous, becoming infuscated towards apex, legs flavous, the hind femora castaneous.

Head much as in preceding species, except that the eyes arc slightly larger; antennae shorter but otherwise much the same. Prothorax with outlines much as in preceding species, but the transverse bisinuate impression more sharply defined, and the punctures larger and more sharply defined, although still small. Elytra distinctly wider than prothorax at base, sides dilated to beyond the middle; punctures and striae much as in preceding species. Length, 2·25 mm.

Hab.—Lord Howe Island (A. M. Lea and wife). Type. I. 7622.

<sup>(7)</sup> Blackb., Ante, 1896, pp. 40, 41.

Certainly congeneric with the preceding species, but still more aberrant from Crepidodera, by the entire absence of longitudinal impressions from the disc of the pronotum, and by the transverse impression continued without interruptions to the fine lateral gutters. On breaking off the prothorax, and examining the front coxac directly from above, their cavities appear to be open behind, but on examining them from behind a narrow depressed ridge is seen to connect the inter-coxal process with the outer portion, although less noticeably so than on the preceding species. Of this species twelve specimens were obtained; nine by beating ferns on the summit of Mount Gower, and three from tree-ferns on Mount Ledgbird; six of the former are of uniform size (2.25 mm.), and of these two, A, have a large blackish isolated median spot on the disc of each elytron: two. B (including the type), have each spot extended to the shoulder and side, so as to occupy a large subtriangular space; one, C, has the spot similarly extended but not so deeply infuscated, and the sixth has the spots scarcely indicated. The three from Mount Ledgbird are slightly larger (2.5-2.75 mm.); two, D. are entirely pale, except for a slight infuscation of the antennae, and the third, E. has spots as on A, and in addition an infuscate spot on the pronotum. The other three from the summit are still larger (2.75-3 mm,); one, F, is entirely pale, except that the antennae are deeply infuscated towards the apex, and that the head and prothorax are of a brighter castaneous than the elytra; one, G, has the elytra pale. except for a slight infuscation of the suture and punctures, but its under surface and apical two-thirds of the pronotum are rather deeply infuscated; the other specimen. H, has the black markings extended to cover most of the elytra, leaving only a bisinuate space on each side, and an obscure spot close to the suture pale, it has a deeply infuscated spot on the pronotum, and most of its under surface is black, with the hind femora partly infuscated.

### Goweria, n. g.

Head moderately large. Eyes moderately large, prominent and coarsely faceted. Antennae rather long and thin, rather close together at base. Apical joint of maxillary palpi conical, not much longer than the subapical one. Prothorax strongly convex, widely transverse, margins very narrow, without discal sulci. Scutellum very small. Elytra strongly convex, with rows of large punctures in light striae. Legs rather short; hind femora very stout; hind tibiae lightly mucronate; basal joint of hind tarsi as long as two following joints combined, claws each with a stout basal appendix.

In Blackburn's table of the *Halticides*, would be associated with AA (on breaking off the prothorax the front coxal cavities appear to be widely open; on looking at them from behind a narrow ridge, considerably below the level of the inter-coxal process, is visible, exactly as on *Sutrea*, given in the table as having the cavities open behind), BB, CC, D, E, F, G, II, I, J, KK—*Phyllotreta*; from which it differs in the shape of its head and prothorax, and in the striation of its elytra. In its head and elytra it approaches the two preceding species, but the complete absence of discal sulei from the pronotum would appear to forbid its reference to *Crepidodera*.

#### Goweria obscura, n. sp.

· Black or piceous, some parts paler.

Head with a bisinuate impressed line from eye to eye, a narrow carina between bases of antennae; almost impunctate. Antennae slightly passing base of abdomen, first joint slightly longer than second and third combined, second slightly shorter and stouter than third, the others to tenth subequal in length and slightly increasing in width, eleventh distinctly longer than tenth. Prothorax about once and one-half as wide as the median length, but more than twice the

length of the sides, apex truncate, base lightly bisinuate; margins very narrow and oblique but subangularly dilated in front; punctures very minute. Elytra widest at about basal third, shoulders strongly rounded; with regular rows of rather large punctures in light striac, becoming smaller posteriorly. Basal segment of abdomen slightly longer than three following combined. Length, 2·5-2·75 mm

Hab.—Lord Howe Island (A. M. Lea and wife). Type, I, 7623.

Seven specimens were obtained on the summit of Mount Gower; they are all very dark, but only one specimen could be regarded as having most of the upper surface really black; the type (and several specimens agree well with it) has the head and prothorax of a very dark castaneous, the prothorax with a black (but not sharply defined) fascia across its middle, and the apex of elytra (and base to a less extent) diluted with castaneous; the legs and basal half of antennae are more or less obscurely castaneous; the abdomen is usually obscurely pale at the tip; one specimen has the hind femora infuscated.

Three specimens, obtained at a much lower elevation, probably also belong to the species, but differ from the types in being smaller and differently coloured. One is castaneo-flavous, with a sharply defined black fascia across the prothorax, and a large black post-humeral blotch on each elytron, its under surface and tarsi are infuscated; the second is of a rather bright castaneous, with the elytra, legs, and abdomen pale flavous, and on each elytron an infuscate post-humeral blotch; the third is still paler, with the post-humeral blotches not traceable; all three have the antennae pale at the base and dark at the apex.

### Adimonia fugitiva, n. sp.

Of a dingy livid flavous, a medio-basal spot on head and three large spots on pronotum black; antennae blackish, bases of the joints, and under surface of the basal ones pale. Rather densely clothed with very short pubescence.

Head with rather small but crowded punctures; with a narrow median carina. Antennae moderately stout, passing base of abdomen, first joint slightly shorter than second and third combined, second distinctly shorter than third, fourth slightly longer than fifth, and distinctly longer than third, the others slightly decreasing in length, but eleventh slightly longer than tenth. Prothorax more than thrice as wide as long, sides rounded, basal angles rounded, the front ones acute; surface shagreened, and punctures usually not sharply defined; with five shallow depressions. Elytra distinctly wider than prothorax, almost parallel-sided; with crowded and sharply defined but not very large punctures, the interspaces minutely punctate; epipleurae moderately wide at base, disappearing well beyond the middle. Legs rather short and stout; tibiae acutely carinated externally; claws bifid. Length, 5-7 mm.

Hab.—Lord Howe Island (A. M. Lea and wife). Type, I. 4462.

The species belongs to Adimonia as defined by Blackburn (Ante, 1896, p. 86), except that the third joint of the antennae is distinctly shorter than the fourth, instead of longer; it is about the size of A. elegans and A. richmondensis, but has the prothoracic impressions much less pronounced and punctures smaller, four basal joints of antennae very differently proportioned, etc. The colour is now as described, but living specimens are of a beautiful pale green. Of the spots on the pronotum one is round and near the base at the middle, the others are submarginal and vary somewhat in shape. The cephalic carina is sometimes sharply defined from the base to the clypeus (just before which it is interrupted), on some specimens it is feeble towards the base, but it is always conspicuous (and usually thicker than elsewhere) on the clypeus.

The species occurs also in Northern Queensland (Blackburn's collection), Cairns (E. Allen, J. A. Anderson, and A. M. Lea), and Port Denison (Macleay Museum).

Brontispa castanea, n. sp.

Castaneous and shining, legs slightly paler than upper surface.

Head produced in front of eyes, then rectangularly narrowed, and with a conspicuous grooved median projection; with coarse punctures between and in front of eyes, smooth at base. Antennae rather stout, slightly longer than head and prothorax combined. Prothorax about as long as wide, sides gently incurved, but near apex suddenly and strongly narrowed, and lightly notched, basal angles notched, near base with a narrow impression, deep across two-thirds, but traceable to the sides; with fine punctures, almost evenly distributed, but large and deep on sides. Elytra very long and thin; each with eight rows of large, deep punctures on basal half, and near apex, but ten between these parts, interspaces with minute punctures, suture and second interstice carinated posteriorly. Under surface with minute punctures. Legs short and thick; tibiae suddenly curved at base and again at apex. Length, 8-9·5 mm.

Hab.—Lord Howe Island (A. M. Lea). Type, I. 7628.

Structurally rather close to *B. froggatti*, but uniformly coloured, projection between antennae wider and slightly dilated to its truncated tip, prothorax with different punctures and angles, a narrow deep impression near its base, and elytral punctures not so closely spaced. A single specimen was beaten from a *Kentia* palm, there was another (damaged) specimen in the Australian Museum, and Mr. A. Musgrave recently took three more on the island.